

BUSINESS ENVIRONMENT

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Theory

Principles of economic growth

Alan Greenspan, Adrian Wooldridge: Capitalism in America

There are three main principles of economic growth:

- Productivity – that describes society’s ability to get more output from a given input. The most commonly used version of productivity is labour productivity. It includes amount of capital (plant and equipment) employed in making things and the number of hours people work, adjusted for their level of education and skills. But “growth economist” led by Moses Abramovitz and Rober Solow added also innovation as factor that explain difference between value of input and output – MFP (multifactor productivity).
- Creative destruction – defines process that drives productivity growth. It is principal driving force of economic growth. Elements like information revolution, reduction of cost of basic inputs in economy, more efficient use of those inputs, transportation revolution (including rise of information technology), location improvement, all those are elements of creative destruction that led to new models that provided growth also on account of diminishing old models.
- Politics – creating environment that support economic growth. America was always good at creating those conditions. Environment that allows failures and deals with bankruptcy quickly and efficiently. Every time politic tried to introduce more regulation it was penalised by losing power.

Disruption

Clayton M. Christensen, Michael E. Raynor: The Innovator's Solution; Creating and sustaining successful growth

There are two main dimensions of disruption:

- Low-end disruption that addresses overserved customers with a lower-cost business model.
- New-market disruption that competes against nonconsumption.

Many disruptions are hybrids, combining new-market and low-end approach.

Disruption is an ongoing force that is always at work – meaning that disruptors in one generation become disrptees later. Disruption is a theory: a conceptual model of cause and effect that makes it possible to better predict the outcomes of competitive battles in different circumstances.

Behavioral economics

Dan Hill: Emotionomics; Leveraging Emotions for Business Success

Born from observations of human behavior instead of abstract theory, behavioral economics involves a handful of essential concepts. For the purposes of simplifying the discussion here, those concepts have been put into one of two realms: either categorization or loss aversion.

- Framing: making a choice more attractive by deliberately comparing it with inferior options.
- Mental accounting: placing artificial limits on the amounts we're willing to spend in certain categories.
- Prospect theory: judging pleasure based on a change in condition rather than on how happy we are.
- Anchoring: evaluating new information strictly in terms of what our baseline of knowledge happens to be. Recency: giving undue weight to recent experiences.
- Familiarity: having a bias towards the status quo.
- New - risk premium: inflating the cost of accepting new risks while casually discounting familiar risks.
- Fear of regret: not making a decision out of fear, so as to avoid making a mistake.
- Decision paralysis: failing to make a decision involving lots of choices for fear of making the wrong one.

Internet development

Tom Goodwin: Digital Darwinism; Survival of the fittest in the age of business disruption

In the internet development, we had three eras and are now going into fourth:

- The portal era
- The search era
- The social era
- The internet of things era

Fourth Industrial Revolution

Klaus Schwab, Nicholas Davis: Shaping the Future of the Fourth Industrial Revolution, A Guide to building a Better World

Technologies that will push and shape world of The Fourth Industrial Revolution are coming from those areas:

- Extending digital technologies: new computing technologies, blockchain and distributed ledgers technologies, IoT
- Reforming the physical world: AI and robotics, advanced materials, additive manufacturing and multidimensional printing
- Altering the human being: biotechnologies, neurotechnologies, virtual and augmented realities
- Integrating the environment: energy capture, storage and transmission, geoengineering, space technologies

Those technologies are affecting industrial capabilities, social relationships and political strategies. They are expanding their footprint into physical world, they are upgrading our physical world, improving decision-making capabilities.

New computing technologies will need to address issues of limitation that we are reaching with implementation of Moore's law. The semiconductor's industry is reaching its horizontal limit. New material will improve situation, but new ways of computing is necessary in order to tackle not only volume issue, but first of all speed, latency and energy issues heavy use of AI technologies will bring. One of those new ways is quantum computing, disruptive in theory and challenging in reality. Qubits used by quantum computing have possibility to be in either 1 or 0 state until measured (bits can only be in one state 1 or 0). This enables them to simultaneously simulate multiple states. Second ability of quantum computing is entanglement, where one qubit provides information about second one. This enables probabilistic shortcuts and improve efficiency in hard mathematical tasks. With improvement of those systems beyond merely theoretical applications, issues of security and trust will emerge, since quantum systems will have capabilities to decrypt almost everything. But

real applications of quantum computing will not be substantial for quite some time. On the other hand, smaller and smaller computers are getting integrated into our environment. We live in computer-built world. Gadgets, wearables, sensors, not to mention that biological computing could soon allow us to replace specialized microchips with custom-design organisms – “biohacking”. Demand for bandwidth and storage is looking for new approaches. One of them is to store data in DNA (Harvard’s George Church). New development will have extreme demand on energy resources and access to benefits of new computing models will be biased, since developed countries have better ability to gain investments and human resources needed for innovations in this area. Today data centers are collecting flows of big data and storage it, but increased number of IoT devices, will maybe demand more localized, distributed environment for data to be access in agile, responsive way.

Distributed ledger technologies or blockchains is providing us with new system for storing and exchanging value in both our digital and real economies. But in order for those technologies to realize full potential in redesigning trust and transactions, collective governance, stakeholder engagements and solving “offline” coordination challenges are needed. Blockchain transactions are transparent, secure and traceable. They provide “internet of value”. This enables small contributors and individuals to become market player since it reduces entry costs. Main value of new technologies is so called “distributed trust”, that is lowering transaction costs, excluding intermediaries, providing possibilities for intellectual property protection even in areas of weak legal infrastructure. But it does bring one big challenge, especially mental challenge of disappearance of central authority. Decentralizing trust by relying on a complex set of algorithms is a radical shift from human deduction as the ultimate source of knowledge to reliance on modern scientific instrumentation.

IoT enables rich data to be combined with smart analytics, device performance data and user-impact data. It brings improvement in communication and collaboration of those devices which increase productivity and efficiency. It is about intelligent-interactive objects that provide new channels for value delivery to citizens. Biggest impact of IoT devices is seen in manufacturing, Using IoT devices will also bring new kind of economy machine-to-machine data economy. IoT value lies in data collection, analysis and management. The diffusion of IoT requires the development and deployment of four different layers:

- first, the devices that sense, communicate and perform actions,
- second, the communication infrastructure that connect those devices,
- third, a secure data management system
- and fourth, the application that process data.

With use of IoT devices we could see rise of outcome economy, where customers will be able to purchase outcomes by hours, liter or meter, rather than buy machinery to produce this outcome. Standardization in order to achieve interoperability and tackling the threat of cybersecurity are just few developments that is needed for proper IoT development. In combination with AI and robotics, IoT will decrease demand for routine manual jobs.

Digital economy ethics challenges are challenges of data ethics and not technology ethics. Life cycle of data – creations, curation, manipulation and use – is under supervision for ethical purposes. Regulation should look at projects from technical feasibility, environmental sustainability, societal acceptability and human preferability perspectives. Data ethics coupled with algorithm ethics and ethical practices should be carefully reviewed when we are further developing digital landscape.

When looking at cybersecurity threat we can adjust our organizations by adjusting the to four areas:

- Move from cybersecurity approach to cyber resilience
- Move from hackers to criminal organizations
- From technical exploits to human behavior
- From individual to collective risks across industries and organizations

Artificial intelligence and robotics are next great area where technology is shaping our world. From conference at Dartmouth college in 1956 and first manufacturing robot in 1961 development skyrocket. AI is gaining

traction because of increased quantity of data, robotics is using automation to improve efficiency and now coupled with AI insight, they can address wider and wider field. Ethics is one of major concerns since AI coupled with robotics if not developed in proper way can pose a threat to whole humanity. The accuracy and usefulness of any algorithms depends on both how they are designed and the nature of data they are trained on. AI and robotics will transform tasks rather than make humans obsolete.

Advanced materials science will impact most if not all technologies of The Fourth Industrial Revolution. Energy storage is one of the hottest areas of research with energy demand from robotics, new computing technologies, blockchain. Materials should be developed in a sustainable way. Blockchain technology could help establish common database of materials and their origin trail. It can be reused by many developers of new materials. AI use can improve time to market. Use of nanotechnology brings ethical issues that need to be handled carefully.

3D printing could dramatically change landscape of manufacturing and producing. Digital plans, distributor over network will enable local production again and could disturb business models of countries with low cost labor. Not to mentioned changes of supply chain models. Terms 3D printing and additive manufacturing describe process where layers are added as manufacturing process. Some barriers Additive manufacturing could face:

- Materials
- Design
- Skills and education
- Cost, investments and financing
- Standard and regulation
- Measurement, inspection and testing
- IP/protection/security

Biotechnology as improvement of our understanding of nature and ourselves, has tremendous influence. This technology is more than other technologies emotively important for most of humankind. This technology is less predictive than let's say digital technologies and very capital intense. One area where biotechnology is used already now is precise medicine, with focus on individuals' profile and targeted area treatments. Second are with potential use is agriculture. The convergence of molecular biology, materials engineering, computational approaches and predictive mathematical modeling is going to impact our society, industrial landscape and global environment.

Neurotechnology enable us to better influence consciousness and thought and to understand many activities of the brain. New technologies are enabling big leap in measurements of brain activities and analysis of this activities. The ability to better measure brain activity could improve drug testing and help understand consumer decision making. Since technology of brain scanning is non-body invasive, its use can be utilized in everyday life for almost everything.

Virtual, mixed and augmented realities are revolutionizing how we experience, understand and interact with the world around us. This technology can be seen as another step-in evolution of interfaces.

Global availability of clean, renewable energy will benefit environment and developing nations with unsecure energy supply. In order to use this energy full, new solutions for energy capture, storage and transmission are needed. With right investments, new technologies such as biobatteries, energy-efficient nanomaterials, modular grid storage, synthetic biological-waste conversion and tidal energy can make further headway. Because of high investment needed into new technologies, multistakeholder agreement between governments and economy is needed to provide stable framework for development of new technologies.

Geoengineering is the idea that humans can deliberately and successfully control the behavior of the Earth's highly complex biosphere. Some of its promised applications include shifting rainfall patterns, creating artificial sources of sunshine and altering biosphere using biotechnologies. Interference in Earth's atmosphere with today's scientifically knowledge is dangerous, we need to establish global framework, since we don't know all

the consequences and actions in one country can lead to consequences in another. Technology can help fight global warming and climate changes, but it is not the only solution.

The Fourth Industrial Revolution will bring cosmos closer to home. Space technologies are now developed not only by governments but also by private companies. A lot of spin in of new technology was done by development of space technology, like microchips and software engineering. Space will get more and more crowded and in order to use space for common use of all parties, private and public, we need to set proper framework and standards.

Challenges of tomorrow can only be solved with collective leadership. Cross-country cooperation and public-private partnership are needed. System leadership is about cultivating a shared vision of change – working together with all stakeholders of global society. System leadership is about:

- Technology leadership
- Governance leadership
- Values leadership

Technology of The Fourth Industrial Revolution is built on digital platform. This means fast changes, lots of data and new communication and transportation systems. New skills are needed for workforce of tomorrow and collaborative innovation is primary development concept. Governance in such a fast-changing environment will require rethinking of governments on what they govern and why. Answer on those question will include how, that should be based on new standards, that will incorporate landscape changes that new technology is bringing. Values leading development of new industrial landscape based on technology of tomorrow should be human-centric.

There are different stakeholders in development in The Fourth Industrial Revolution:

- Government – that should adapt agile government approach and learn to work across boundaries.
- Business – that should learn by doing, invest in people, adopt and engage in new governance models, develop and implement technologies with opportunities in mind.
- Individuals – that should explore, experiment and envision and be political.

Industry 4.0

Bruno Salgues: Society 5.0; Industry of the Future, Technologies, Methods and Tools

Three visions (environment, function and structure) must be coherent. The determinants of the factory of the future are digitization and direct manufacturing. Four basic elements of industry 4.0 are:

- Decision decentralization
- Interoperability and automation
- Information transparency and virtualization
- Technical assistance

When we talk about direct manufacturing, we have in mind: 3D printing, continuous extrusion, numerical control programmable machines, automatisms and programmable robots.

Five types of factories of the future are:

- Factory 4.0 – integrated logistic chain
- The Key-Technology factory – highly differentiating process
- The Craft-Industrial factory – tailor-made production becomes industrialized

- The Client Drive factory – customer launches the process
- The Low-Cost factory – mostly operated in Open Source

Many current factory locations will be abandoned with factories of the future.

AI building

Max Tegmark: Life 3.0., Being human in the age of Artificial Intelligence

One of the most important questions in AI development is: should we give AI goals and if yes, what kind of goals. Goal-oriented approach is hard-wired in physics law. Even nature try to optimize something. Nature main goal is entropy. But this goal is not final state of everything, since life is fighting back with tendency to adjust itself and using its ability to reduce its entropy by increasing entropy around it. Living organism is an agent of bounded rationality that doesn't pursue a single goal, but instead follows rules of thumb for what to pursue and avoid. Our human minds perceive these evolved rules of thumb as feelings, which usually (and often without us being aware of it) guide our decision making toward ultimate goal of replication. Human behavior strictly speaking doesn't have a single well-defined goal at all. When we talk about goal-orientation, we need to include goal-orientation design and goal-orientation behavior. When we build AI and assign goals to it, it is extremely important to align them with ours. When building AI, we would like AI to learn our goals, adopt them and retain them. When we set AI to achieve its ultimate goal, we can actually predict what sub-goals it will work on in order to preserve and improve its chances to achieve its ultimate goal.

If we set it in this way, we can look at pyramid like this:

- Ultimate goal
 - Capability enhancement
 - Better hardware
 - Self-preservation
 - Resource acquisition
 - Better software
 - Better world model (truth)
 - Goal retention
 - Better world model
 - Information acquisition
 - Curiosity

Ethical problem and the goal-alignment problem are crucial ones that need to be solved before any superintelligence is developed. Goals can be independent of system intelligence. Intelligence is only the ability to accomplish complex goals, regardless of what these goals are.

Consciousness is subjective experience. When we talk about idea of non-physical force in humans, soul or anima, we need to come back to original idea that our bodies are nothing but quarks and electrons, which move accordingly to physical laws. If future technology will be able to track all our particles and show that they move exactly according to physical laws, then idea of consciousness and soul will be beaten. If on the other hand they will find a force, outside physical laws, that will move them, this new entity can be study as we study new fields and particles in the past. Consciousness is CEO of our brain. Work only with the most complex questions, doesn't work on lower automated levels, but if it wants to, can check how this low level is run. Consciousness is an emergent phenomenon, with properties above and beyond of those of its particles. Italian author Giulio Tononi has proposed one quantity, which he called "integrated information", denoted by a Greek letter Phi, which basically measures how much different parts of a system know about each other. His theory is called "integrated information theory". If we use this theory on consciousness, we could say that consciousness is the way information feels when being processed in certain complex way.

Coming back to AI and potential for its consciousness, or experience-based activities, author calls it sentronium for the most general substance that has subjective experience (sentient). He believes that if consciousness is

the way that information feels when it's processed in certain ways, then it must be substrate-independent. He defines four principles that information processing needs to obey to be conscious:

- Information principle – A conscious system has substantial information-storage capacity.
- Dynamics principle – A conscious system has substantial information-processing capacity.
- Independence principle - A conscious system has substantial independence from the rest of the world.
- Integration principle - A conscious system cannot consist of nearly independent parts.

Byron Reese: The Fourth Age; Smart Robots, Conscious Computers, and the Future of Humanity

There are three different approaches to how to build AI:

- Classic AI – thinking through all the factors and building a model that makes those factors, weights them accordingly and makes suggestion.
- Expert system – you write down every rule. You then arrange those rules in a way that someone can enter any relevant variables and then system will make a suggestion based on those rules.
- Machine learning – you take all the data and you get computer to build rules.

AI in business

Thomas H. Davenport: The AI advantage, How to Put the Artificial Intelligence Revolution to Work

If we look at AI through the lens of business capabilities, we can say it supports three important business capabilities:

- Automation of structured and repetitive work process (robotics or robotic process automation)
- Gaining insight through extensive analysis of structured data (machine learning)
- Engaging with customers and employees (NLP, chatbots, intelligent agents, machine learning)

If we talked about AI usage in companies, it is important to see it from two angles. First is applications and we talked about it so far, second is capabilities. If we want to work on projects of AI implementation with proper capabilities perceptions, we need to:

- Understand which technologies perform what types of tasks
- Build on current strength in big data and analytics
- Create a prioritized portfolio of technology matched to processes and tasks
- Create a series of pilot or proof-of-concept projects
- Engage in cognitive work redesign using design-thinking principles
- Focus on scaling and achieving productivity benefits

There are three area of assessments that company should do before starting AI projects:

- The domain assessment - when companies look at AI projects and are estimating which ones to address first, one of the main tasks is to determine which business domains are the ones where company can benefit by using AI – the domain assessment. Sometimes problems can arise from knowledge bottleneck, scaling issues or inadequate firepower.

- The use case assessment – evaluate use cases in which cognitive applications would generate substantial value and contribute to business success.
- The technology assessment – it is important to know if current AI capabilities can much use cases defined. If not, small steps approach should be used with long-term planning in mind.

If we want to achieve all benefits that use of AI can bring, we need to re-design work processes. It is easy to just use AI to improve productivity of existing processes, but if you only use it for such scenarios, limitations of old processes will keep AI usage benefits low. Scaling is a challenge today, since companies can run quite few proof-of-concepts but are not able to implement full size projects. If scaling is to succeed, firms must also work to improve productivity. You basically gain benefits, not with people reductions but with growth of business at the same level of peoples.

Nine factors that limit AI-driven business model change are:

- Technologies aren't quite there yet.
- Partial solutions are all that's available.
- AI picks off the easiest parts of process.
- No common sense.
- Startup processes are required, but startups don't have customers.
- Big companies buy startups.
- Startups don't have resources to wait out change.
- The installed base will take a while to disappear.
- Most cognitive applications are standalone but need integration.

Amazon leadership principles

Natalie Berg, Miya Knights: Amazon; How the world's most relentless retailer, will continue to revolutionize commerce

Amazon leadership principles:

- Customer obsession
- Ownership
- Invent and simplify
- Leaders are right, a lot
- Learn and be curious
- Hire and develop the best
- Insist on the highest standard
- Think big
- Bias for action
- Frugality
- Earn trust
- Dive deep
- Have backbone; disagree and commit
- Deliver results

Living in a corporation

Dr. Mark Powell & Jonathan Gifford: Machiavellian Intelligence; How to survive and rise in the modern corporation

There are eight core principles of corporate behavior:

Corporations are not social structures

Corporations are not »communities« or »associations of individuals«. Because of this essential disjoint between the interests of the corporation and the interests of the people who work for it, people's relationships to the corporation and to each other, as members of the corporation, are based almost entirely on self-interest.

Corporations are feudal

Authors is comparing corporations to feudal kingdoms. They believe that a lot of insights into corporation work we can get from reading Machiavelli and his Prince. Machiavelli was comparing Ottoman Empire that was governed by Sultan who divided his kingdom and appointed people to administer various regions. In this system people loyalty was always to Sultan and not to administrators. He contested that structure to structure of 16th century France, where king gave land to barons and many of the barons in France represented significant power bases, that were very independent. In reality, the modern corporation is a feudal structure with a powerful "monarch" at its head, but with many "barons" who hold significant power and command considerable loyalty from their individual fiefdoms.

In 2015 Fortune magazine reported that CEO in the 500 largest companies in US had a tenure of 4.9 years. In the corporate world, monarchs change frequently. When that change occurs, everything within the corporation shifts: old alliances fall apart; promising careers are cut short; new powers emerge.

In order to be successful in this world, you need to find out power bases, you should think about their strengths, consider who is disaffected or ambitious; you should look for own alliances and supporters and weight very carefully chances of power bases and possibilities of future success and then pledge alliances to them. People are more likely to be maneuvered into roles by their sponsors and supporters than they are to achieve promotions through sheer brilliance. Since there are fewer and fewer roles when you are coming closer to the top, for you to succeed, someone else must fail.

Corporate courts have etiquettes and intrigues

If corporation is like a feudal kingdom, then head office and the executive suite represent the feudal court. If you want to progress in your career in corporation, it is essential to get yourself to court and to get yourself noticed. You have to become »one of the court people« to progress in corporation. It is not actually necessary to sell your soul to the corporation, but it is essential that the corporation believes that you have done so. Once you have mastered the essential etiquettes of court, keep your eyes and ears open for the intrigue. Knowledge is power and gossip is priceless – once it has been carefully cross-referenced.

Successful courtiers seek out advancement

The world is full of talented, hardworking people; very few of them are CEOs. It is a good plan to think of yourself as a luxury brand. Choose your USP, find opportunities to connect with the people that matter and tell them what sets you apart from the others. Create your brand and promote yourself. Give people a reason to help advance your career. No one will seek you out.

Powerful masters need loyal followers

Every person of power who wants to become more powerful needs supporters. Corporations usually promote people that have them. As a foot soldier, you have a chance to advance with strong sponsor. Your sponsor will let you know that he or she has their eyes on a particular future role for themselves and will make it clear that

you would be in line for a particular promotion to a specific role if they can count on your continued support. But be careful, allegiances can shift. That are critical moments in any career when ability to spot the moment that a star's light is beginning to fade is the single most important factor affecting your career progression. Being in the wrong camp at the moment when power is shifting can be a major setback. But backing the wrong horse is usually a temporary setback, not a career killer.

No one can be trusted

Everyone has their own agenda. Trust no one. When anyone – including your friends – says anything or asks anything, consider what their agenda might be. No question is innocent. As famous French diplomat who served under Napoleon and King Louis XVIII. Talleyard said: »Mistrust first impulses; they are nearly always good, and «¹Speech was given to man to disguise his thoughts. «¹ Do not make mistake of giving your natural, honest response to any question. Do not be self-deprecating and avoid irony, sarcasm and wit; they are generally misunderstood. If you run into problems, don't admit your mistakes. One way of how to explain failures is: »We did meet some obstacles that no one had foreseen, but a great deal of good was achieved along the way. «

Everyone is disposable

When we are young, we believe we are immortal; when we are at work, we believe that we are indispensable. Corporation, unlike you, really is potentially immortal. It will use up a very large number of successful executives to further its ends over time and it will spit them all out. To be brutally honest, most people do not actually make and truly outstanding contribution to the corporation's objectives. Corporations are designed to withstand the loss of any individual executive. Middle managers are most of risk. Corporations have a habit of removing whole layers of middle management. Another risk run by middle managers is that they become pawns in the power struggles of more senior managers. Many actions that are based on »redundancy phase« are merely a way of reorganizing the corporation when managements shift. So the best advice for work in corporation is to earn as much money as you can, as soon as you possibly can. Because you are dispensable, you can never be secure. Resign yourself to the fact that this is a game that you are certain to lose in the long run. In the meantime, amass power.

Corporations are constantly on a war footing

The people at the very top of any corporation feel that they are under siege. As a direct result, they see other executives only in terms of how useful they will be in helping to ward off the enemy. So you need to develop and flag up the resources that you have. Create a sense of your own value and currency. Build alliances, but be careful when they change. Your job is to identify weaknesses of your peers and to swoop in on them with your cleverly amassed overwhelming resources. The battle for power in the modern corporation has a great deal in common with the constant minor wars between the principalities of Renaissance Italy.

The Six Habits that are Bad for Progressing your Career – (too Good habits)

- Working too hard
- Being helpful
- Being generous
 - Don share your unique resources. Your most important resources are:
 - The information that you have and the things that you understand
 - Your personal skills and abilities
 - Your experience
 - Your network of contacts
 - Leveraging your assets is about planning and politics.
- Going it alone

¹ In the book on page 41

- Being different
- Sticking things out

Business models

New revenue models

Nicolaj Siggelkow, Christian Terwiesch: Connected strategy, Building Continuous Customer Relationship for Competitive Advantage

New revenue models are using six guiding principles:

- Think value creation first
- Make pricing contingent on performance
- Remember the ecosystem is broader than the supply chain
- Get paid as value created
- Reinvest some of the created value into the long-term relationship
- Be cautious when replacing cash payments with data payments from users

Smart business

Ming Zeng: Smart Business; What Alibaba's success reveals about the future of strategy

New paradigm is interconnected players – buyer, sellers, and service providers – come together and coordinate through real-time data mediated by technology. Author calls this strategy smart business. To enable such massive, complex interconnection, companies must automate many decisions and actions. Unimaginable scale is possible when businesses are smart.

Data and network reinvent strategy. These two new capabilities change the dynamics of value creation. Smart businesses allow the entire value chain to be reconfigured to achieve both scale and customization, using the combination of two forces, network coordination and data intelligence. Network coordination + data intelligence = smart business. Network coordination is the breaking down of complicated business activity so that groups of people or firms can get it done more effectively. Data intelligence is what author calls business activity of effectively iterating products and services according to consumer activity and response.

Constant flowing data created from real-time interactions and processes online, creates a continuous feedback loop that automatically generates decisions that become increasingly »intelligent«. Companies can transform themselves by ensuring that routine decisions are made automatically. Smart business automates much of the exploitation to which firms are accustomed, but in return requires much more experimentation.

Strategy no longer means analysis and planning, but rather a process of real-time experimentation and customer engagement. When strategy is no longer predicated on competition, but centers on coordination, the ways of creating value are completely transformed. Chinese companies are better positioned to take advantage of networks coordination – combining business actors seamlessly across the internet versus building corporate organizations.

Management must move from managing business to enabling it.

Network coordination is the nearly autonomous management of the simultaneous interactions of multiple parties to a business task. In Alibaba this is about online orchestration of sellers, buyers, producers and logistic players. They apply networks approach since they lacked the time, skills, or investment resources to create some of the capabilities needed in-house. Today's demand like scale, cost, speed and customization, can only be covered by decentralized structure of network coordination.

Renting model

Michael C. Munger: Tomorrow 3.0, Transaction Costs and the Sharing Economy

Development in selling reductions in the costs of renting can be separated in three parts:

- Third great economic revolution will be based on innovations that focus on digital tools that reduce transaction costs.
- Society will be able to make much more intensive use of durables of all kinds. Excess capacity will become commodity to be sold. Quality of products will go up, quantity will go down.
- People will collect experience not belongings. Very few people under thirty will have jobs or driver licence.

Three most important effects of the Middleman's Sharing Revolution will be:

- A reduction in the amount of physical stuff, in the form of consumer durables, being produced in factories by workers.
- A decline in the cost of having access to a variety of stuff, and reduced needs for storage.
- An ambiguous, but unsettling, effect on real wages, with both the direction and variance of real wages very much in flux.

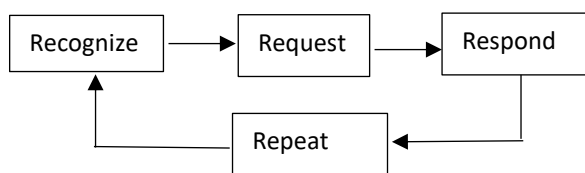
Connected strategy

Nicolaj Siggelkow, Christian Terwiesch: Connected strategy, Building Continuous Customer Relationship for Competitive Advantage

Connected strategies have two key elements: a connected customer relationship and a connected delivery model.

THE CONNECTED STRATEGY

Connected customer relationship



Connected delivery model

Connection architecture
Revenue model
Technology infrastructure

If the first three elements (recognize, request and respond) are important, it is with repeated dimension of customer interactions that companies achieve sustainable competitive advantage. Repeated dimension gives company ability to learn from existing interactions in order to shape future ones. It also helps firms learn on a level of particular customer and on population-level learning.

There are four different types of connected customer experiences:

- Respond-to-desire
- Curated offering
- Coach behavior
- Automatic execution

Once we know what type of connected relationship we want to design for our customers the question is how to implement it. At that moment we think about delivery models.

Connected strategy can create value without being a platform. Platform business are not directly involved in serving customers by providing them with goods or services. Instead their focus is on connecting the producers and customers of such products or services. Platforms are particular type of what we call connection architecture. They provide platform for payment, trust building and dispute resolution and decrease demand for providers to enter into market. On most platforms, the relationship between customers and providers is primary transaction one, and the revenue model of the platform is to take provisions on that these transactions. Connected strategies aim for long-term relationship and they want to avoid transactional pricing.

When we talk about connected architecture, there are five main types, that are used across industries:

- Connected producer
- Connected retailer
- Connected market maker
- Crowd orchestrator
- Peer-to-peer network creator

Connected strategy matrix is a matrix that has customer experience on x axis and the connection architectures on the other axis.

	Connected producer	Connected retailer	Connected market markers	Crowd orchestrator	P2P network creator
Respond-to-desire					
Curated offering					
Coach behavior					

Automatic execution					
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Firm can create more than one customer experience and can operate with more than one connection architecture. There is no »one size fits all« for all connected strategies.

To build a connected strategy, you will have to have policies that address these guidelines, including the following:

- Collection consent
- Data quality
- Purpose
- Nondisclosure
- Safety and breach notification
- Openness
- Access
- Data portability
- Data erasure
- Accountability

Connected customer relationship get deeper and deeper over time by moving through four levels of customization:

- Level 1 is about creating a unified customer experience by weaving together previously unrelated episodes.
- Level 2 uses the data from past interactions to improve customization.
- Level 3 is about developing the capability of delivering on those drivers when and where desired by the customers.
- Level 4 corresponds to a move of the firm to tackle more fundamental needs.

Online business

Natalie Berg, Miya Knights: Amazon; How the world's most relentless retailer, will continue to revolutionize commerce

Three categories are still slow in moving into online world: food, fashion and furniture. According to Credit Suisse there are 13 independent factors that relate to online grocery adoption and profitability:

- Broadband penetration
- Tablet and smartphone penetration
- Online share of retail spends
- Amazon penetration
- Startup/independent culture
- Urban driving infrastructure
- Metropolitan areas with more than 1 million inhabitants (conducive to in-store picking model)
- Metropolitan areas with more than 5 million inhabitants (conducive to centralized distribution)
- GDP/capita
- Car ownership
- Prevalence of double-income households
- Density of supermarket space

- Inclement seasonal weather

E-commerce is more and more acknowledging often-unreported costs like:

- Shipping and handling fees for free and fast shipping.
- Increased returns and restocking costs and loss of margin.
- Higher corporate costs to support e-commerce division.
- Additional on-line marketing expenses.
- Incremental distribution and warehousing cost because of piece picking.
- Deleveraged store base and diluted store labor.
- Increased cost due to omnichannel capabilities.
- Inventory management issues.

When you are looking at complexity of last mile delivery, we can calculate it with multiplication of different stages option: order (5) x fulfill (8) x deliver (7) x receive (9) = 2.520

- Order
 - Scanned or selected by customer instore
 - Telephone
 - Mobile – site/app
 - Desktop
 - Handsfree – voice
- Pick & pack (fulfill)
 - Customer instore
 - Instore by retailer for collection and shipping
 - Dark store
 - Hybrid store
 - Centralized – FC/ Hybrid DC
 - 3rd Party
 - Drive
 - Wholesaler manufacturer
- Ship (deliver – last mile)
 - Customer instore
 - 3rd Party, on demand “drop ship”
 - National/global Couriers
 - National Parcel Post (local or express)
 - Retailer Own – transportation fleet
 - Retailer Own – store employees deliver
 - Cross-border Facilitator
- Fulfill (Receive)
 - Customer instore
 - Instore click & collect desk
 - Curbside
 - Locker/kiosk
 - Drive
 - Proximity retail
 - Post office
 - Non-store/public space
 - Home

Customer

Customer experience

John A. Goodman: Customer Experience 3.0; High-Profit Strategies in the Age of Techno Services

Great CE is only possible with use of proper technology. It should be used for tracking, analyzing and acting upon customer and transaction data.

Customer experience = People + Process + Technology. People can only deliver great end-to-end CE if they are supported by well-designed processes and technology. CE covers every activity that organization performs, including activities that do not directly touch customer but that affect the customer's overall experience.

Four-part framework of CE strategy consists of:

- Doing It Right the First Time (DIRFT)
- Encouraging easy access to service via effortless channels. (access)
- Creating a complete customer service experience via every communication channel. (services)
- Listening and learning by creating an effective VOC process. (L&L)

People, processes and technology must be properly tuned in nine areas to create a flexible, customer-focused culture.

- Clear Brand Promise – the brand promise is the foundation, which directs the people, processes and technology in the next eight areas.
- Clear Accountability for Delivering the Brand
 - Formalized structure
 - Leadership that leads by example
 - Peer accountability
 - Employee empowerment
- Focused Values Translated into Operation Guidelines
- Formal Processes for All Key Activities
- Measurement and Feedback – direct data sources include customer satisfaction measurement, complaints, market research, social media and VOC processes. Indirect sources include quality measurement, operational data, online reviews sites and continual feedback on employees.
- Ongoing Communication to Customers, Channels and Employees
- Intentional Emotional Connection
- Employees Who Deliver the Brand – companies can teach people the necessary skills but cannot change their basic personalities.
- Customized Brand for Market Segments and Geographies

Nicolaj Siggelkow, Christian Terwiesch: Connected strategy, Building Continuous Customer Relationship for Competitive Advantage

Recognize		Request				Respond		
Latent need	Awareness of need	Search for options	Decide on	Place order	Pay	Receive good/service	Experience good/service	Post-purchase experience

		to fulfill the need	favorite option					
Why		How				What		

Francis Buttle: Customer relationship management; Concepts and technologies – second edition

The idea of customer experience has its origins in the work of Joseph Pine and James Gilmore. They suggested that economies have shifted through four stages of economic development: extraction of commodities, manufacture of goods, delivery of services and staging of experiences.

Attributes of services (HIPI – heterogeneity, intangibility, perishability and inseparability):

- Intangible-dominant: services are high in experience and credence attributes, but low on search attributes.
- Inseparable: consumed at the same place as produced. Customer is involved in it.
- Heterogeneous: produced by people, hard to guarantee the content and quality of a service encounter.
- Perishable: cannot be held in inventory for sale at a later time.

Influence

Dan Hill: Emotionomics; Leveraging Emotions for Business Success

The six principles of influence:

Prospects will initially focus on whether they enjoy the salesperson’s presence, meaning whether they like the person they are with. Over subsequent meetings, if the interactions have been supportive and pleasant, familiarity will grow and the degree of liking will increase. But up front and at first, prospects are alert – even wary – and must be put at ease. **Likeability** is especially pertinent during the approach step, when establishing comfort for the prospect is vital. The other three emotional influencers are **compatibility, reciprocity and consistency**. While emergent during the approach step, they mostly come into focus for prospects during the dialogue step, as follows: Training programs that tell salespeople to mirror and match the prospect’s body language are half right. Ultimately, even more important is identifying and respecting the prospect’s belief system. Remember that nothing is more innate or deeply emotional than a person’s worldview. Reflecting a prospect’s beliefs respectfully is imperative because people are comfortable with and like those who are like them. Both liking and compatibility can be reinforced through favors or small signs of courtesy that invite reciprocity from prospects. Not only do people feel socially obligated to return favors, doing so makes them feel good. Through such acts of mutual generosity an emotionally savvy salesperson can add glue to the budding relationship. Consistency matters because during the first few encounters a prospect is still trying to figure out who the salesperson really is as a person. A consistent manner will help increase comfort in the belief that the personality on display will stay the same once the deal is signed and support services may be required. Consistency demonstrates integrity. As such, it also sets up the quality of assurance that will make the presentation itself far more effective. Last two principles, **authority and scarcity**, are indeed more rational in nature.

Trust

David H. Maister, Charles D. Green and Robert M. Galford: The Trusted Advisor

There are five distinct steps in development of trusted relationship:

1. Engage – Attention becomes focused.
2. Listen – Ears bigger than mouth: acknowledge and affirm.
3. Frame – The root issue is stated clearly and openly. Using formulation of problem statements, hypotheses and point of view built around what is important to client. Framing is usually the point in the process where the client becomes consciously aware of value being added by the advisor.
4. Envision – A vision of an alternate reality is sketched out (it should be sketch together with customer and without trying to offer fixed solution of the problem prematurely). This is point in the process when client recognize his true goals and define them in a way that they are realistically achievable.
5. Commit – Steps are agreed upon; sense of commitment is renewed. Client in this phase can see what it will take to achieve goals.

All phases demand different skills from advisor. Engage requires the skill of being (credibly) noticed. Listening requires an ability to understand another human being. Framing requires creative insight and emotional courage. Envisioning requires a spirit of collaboration and creativity. Commitment requires the ability to generate enthusiasm and sometimes ability to manage down overenthusiasm.

Engagement is starting point in developing trust. We must engage quickly around something that is really meaningful to the client. Sometimes study client industry and understand it can earn us right to engage. When facing existing customer and working at engagement phase, we can address competitive, personal and career issues that are relevant to our client. But we have to be careful about timing. We need to define topics, that are urgent and topics that are important, and address them accordingly. If you have only five minutes start with urgent and then touch important, if you have more time, start with important and then also work on urgent. Add value. Just having a meeting isn't enough. If you can't add value, postpone the meeting. Wait until you can add value. It will be worth the wait.

Listening earns you right. But you should listen actively and not passively, and you should acknowledge that listening is also about emotions not only rational analyses. There was research that showed that business people can only listen to 30-60 seconds without their mind being distracted by some other thought. Ariel Group communication-training group from Cambridge teaches idea of reflective listening that is followed by supportive listening and finally listening for possibility. When listening we should let the speaker set the structure, because we will hear his/her story and we will get better insight. But we can use agenda-setting discussion in the beginning in order to clarify client wish for the meeting.

Framing is the act of crystallizing and encapsulating the client's complex issues (and emotions) into a problem definition that, in an objective manner, provides both insight and a fresh way of thinking about the problem. Framing can be rational and emotional. Rational is very common for advisors and lawyers. The effectiveness of the advisor does not lie so much in the invention of the next (proprietary) paradigm as it does in finding the way to lead a particular client, with particular problem, into seeing the relevance of an old (new) paradigm. Emotional framing is first and foremost about the courage to take personal risk and surface hidden emotions. One of the techniques for emotional framing – for saying things that cannot be said even though everybody knows them – is naming and claiming.

Envisioning is energetic phase. Instead focusing immediately on solution when framing is finished, building vision of potential future with client can have enormous motivational affect. In this phase focus on descriptive sentences ask questions about things like benefits, end states or outcomes. Wording like: "...where it is, we want to go and what it is we're really trying to achieve...", can be used.

Commitment is about confirming that client understand what will be necessary to solve the problem and is willing to do what it takes to achieve the goals. Without commitment advice is merely the expression of opinions. Client usually commit for one of two reasons: either they are feeling pain or energy around a topic; or

they have been captivated by something new, different and totally appealing. Commitment in the context of the trust process differs from simple action planning in two respects: it is joint, and it is personal.

All those activates are very common but a lot of times they are not followed for different reasons: from perceiving it too risky(usually perceived risk are risk to credibility and risk to intimacy) to be jumping into action before all steps are done (this is usually done because we focus too much on ourselves, we believe in selling only content, the desire for tangibility and because we are searching for validation).

Trusted advisor should be able to adapt to different client types. Some difficult types of customers are:

- fact clients,
- I'll get back to you client,
- you're expert, dummy client,
- let me handle that client,
- let's go through this again client, y
- or don't understand client,
- my enemy's enemy is my friend client,
- just like, you know, come on client
- oh, by the way client

Companies that can create trusted relationship with clients have better chances to be hired. In order to serve as trusted advisor and caring professional, you need to integrate services and sales. Sometimes the bestselling technique is to not sell, but to commence the service process. Some advisors don't like to sell, but good sales are good services and to be professional we need to point out possibilities. Some other techniques to build trust with client are:

- Involving the client in the process
- Making reports and presentation more useful and easier to pass on
- Helping the client use what we deliver
- Making meetings more valuable
- Being accessible and available

Jobs to be done and non-consumption

Clayton M. Christensen, Michael E. Raynor: The Innovator's Solution; Creating and sustaining successful growth

The functional, emotional and social dimension of the jobs that customer need to get done constitute the circumstances in which they buy. Customer "hire" products to do specific "jobs". Companies that target their products at the circumstances in which customers find them-selves, rather than at the customers themselves, are those that can launch predictably successful products.

Competing against nonconsumption often offers the biggest source of growth in a world of one-size-fit-all products that do no jobs satisfactorily.

There are at least four reasons why managers in established companies focus more on attribute-based market segments than what customers want: the fear of focus, the demand for crisp quantification, structure of many retail channels and advertising economics that target products at customers rather than circumstances.

Sharp focus on jobs that customers are trying to get done, holds the promise of greatly improving the odds of success in new-product development. Quantification is integrated in corporate structure, all reports are about

products, customers and organizational units. Many retail and distribution channels are organized by product categories rather than according to the jobs that customers need to get done. Brands are, at the beginning, hollow words into which marketers stuff meaning. If a brand's meaning is positioned on a job to be done, then when the job arises in a customer's life, he or she will remember the brand and hire the product.

Products should not ask customers to change jobs, they should offer better way (efficient or convenient) what they're already trying to do.

The mismatch between the true needs of consumers and the data that shape most product development efforts leads most companies to aim their innovations at nonexistent targets.

CRM

Francis Buttle: Customer relationship management; Concepts and technologies – second edition

There are four types of CRM:

- Strategic – focused upon development of a customer-centric business culture.
- Operational – automates and improves customer-facing and customer supporting business processes.
- Analytical – concerned with capturing, storing, extracting, integrating, processing, interpreting, distributing, using and reporting customer-related data to enhance both customer and company value.
- Collaborative – is about strategic and tactical alignment of normally separate enterprises in the supply chain for the more profitable identification, attraction, retention and development of customers.

Companies are (according to Kottler) about product, production or selling, customer-centric approach is another potential business model.

Operational CRM is about sales force automation, marketing automation or service automation.

Models of CRM:

- The IDIC model: identify, differentiate, interact and customize.
- The QCi model: The model features people performing processes and using technology to assist in those activities.
- The CRM value chain: The model has five primary stages (customer portfolio analysis, customer intimacy, network development, value proposition development and managing the customer lifecycle) and four supporting conditions (leadership, culture, data and IT, people and processes).
- Payne's five process model: Adrian Payne identifies five core processes (the strategy development process, the value creation process, the multichannel integration process, the performance assessment process and the information management process).

Touch points

Natalie Berg, Miya Knights: Amazon; How the world's most relentless retailer, will continue to revolutionize commerce

Some of new customer touch-points that Amazon introduced, both physical and digital:

- Dash Buttons: wi-fi connected one-click recording buttons place in shoppers' homes.
- Dash replenishment service: device-driven replenishment scheme.
- Alexa: AI-powered virtual assistant.
- Dash Wand: handheld device that allows for barcode scanning and voice-activated reordering,
- Dash Virtual Buttons: one-click recording available on Amazon's app and site.

Organization

Starting team

Matt Mochary: The Great CEO Within, the tactical guide to company building

Founding teams should never grow beyond six until there is true product - market fit. Product - market fit (PMF) is the milestone of having created a product that customers are finding so much value in that they are willing to both buy it (after their test phase) and recommend it. Metrics that show whether PMF has been achieved include revenue, renewal rates, and Net Promoter Score. For a B2B company, it's hard to imagine PMF at anything less than \$ 1 million in annual recurring revenue. Why not grow beyond six team members before reaching PMF? Three main reasons: morale, communication and organization, and speed. Until PMF is achieved, the company must have an appropriate morale to be able to adapt to negative customer feedback and potentially pivot the company.

Once you have achieved product - market fit, that is the right time to blitzscale and win the race to market share. You're going to need to diversify your skills and grow your team. To do this, you will need to create massive awareness (marketing), walk many customers through the sales process (sales), hold those customers' hands as they set up and use your product or service (customer success), harden your infrastructure to withstand many users at once (DevOps), get rid of technical debt and add all the features promised in your roadmap (engineering), update the product roadmap to meet the most urgent needs of your customers (product), and all the nontechnical operations (people [recruiting , training , and HR], finance, legal, office). All of this requires hiring talented and experienced people to fulfill those functions. First raise the money needed to hire this team, and then begin hiring.

Value chain

Value network

Clayton M. Christensen: The Innovator's Dilemma; When new technologies cause great firms to fail

Value network – is the context within which a firm identifies and respond to customers' needs, solves problems, procures input, reacts to competitors and strives for profit. In established firms, expected rewards, in their turn, drive the allocation of resources toward sustaining innovations and away from disruptive ones. This pattern of resource allocation accounts for established firms' consistent leadership in the former and their dismal performance in the latter. As firms gain experience within a given network, they are likely to develop capabilities, organizational structures and cultures tailored to their value network's distinctive requirements. The definition of a value network includes also cost structure.

Company value

Marco Iansiti, Karim R. Lakhani: Competing in The Age of AI; Strategy and Leadership When Algorithms and Networks Run the World

The value of the firm is shaped by two concepts:

- Firm's business model – defined as the way the firm promises to create and capture value.
- Firm's operating model – defined as the way the firm delivers the value to its customers.

Business model is about strategy, operating model about systems, processes and capabilities. First is about theory, second about practice.

Company must create value for a customer that prompts her to consume the company's product or service. Company must deploy some method to capture some of the value created. The reason customers choose to use a company's product or services is called value creation and it has to do with the particular problem the company is solving for customer. This is sometimes also called value proposition or customer promise. On the other hand, company should capture some of this value, preferably less than the value it creates for the customer.

Integration or modularity

Clayton M. Christensen: The Innovator's Dilemma; When new technologies cause great firms to fail

But a solution differs across the two circumstances: whether products are not good enough or are more than good enough. If they are not good enough, you should look for integration inside your own organization. If they are good enough, you look for outsourcing and specialization. We are talking about interdependent architecture or modular one. Interdependent optimize performance (functionality and reliability), modular optimize flexibility.

Interdependence is about integrated companies. When functionality demand from customers are met (they are not willing to pay more for improvements), then they become willing to pay more for innovation in speed, convenience and customization. Moving into modular design phase is time of performance surplus. Modularity has a profound impact on industry structure because it enables independent, nonintegrated organizations to sell, buy and assemble components and subsystems.

Pattern is:

- The pace of technological improvements outstrips the ability of customers to utilize it.
- This forces companies to compete differently.
- As competitive pressures force companies to be as fast and responsive as possible, they solve this problem by evolving the architecture of their products from being proprietary and interdependent toward being modular.
- Modularity enables the dis-integration of the industry.

For partners to work in modular environment and expand their supplier network, three conditions must be met: specificability, verifiability and predictability.

Amrit Tiwana: IT Strategy for Non-IT Managers; Becoming and Engaged Contributor to Corporate IT Decisions

A value chain is a series of linked activities that your firm performs, each of which ideally adds value that your customers are prepared to pay. The value chains of most firms with the same strategic aspiration in an industry have comparable structures. We have primary and secondary activities in value chain. IT was part of second but it should not be anymore. Value chain are information intensive. IT can alter value chain either as:

- Steps
 - Operational effectiveness
 - Inbound logistic
 - Operations
 - Outbound logistic
 - Sales
 - Service
 - Value-added
 - Inbound logistic
 - Operations
 - Outbound logistic
 - Marketing
 - Service
- Linkages
 - Structural reconfiguration – disintermediation (bypassing firms in your value chain – Amazon brought authors directly to consumers in book industry).
 - Coordination
 - Among functions
 - Among firms
 - Substituting inventory with information
 - Anticipating shifts in demand

Being competitive is one thing, but staying competitive is another.

Principles

Matt Mochary: The Great Ceo Within, the tactical guide to company building

For an organization to work well, three things must occur at every level of the organization and be apparent at every meeting: Accountability, coaching and transparency. Accountability is declaring a destination (vision, OKRs, KPIs); the action steps to get there (actions); and whether those actions steps were taken (and eventually the destination achieved). Coaching is declaring the current health of the entity (individual, team, department, company), both the good and the not good; and with the not good, what the issue is in detail and a proposed solution. Transparency is declaring (to a person's manager, peers and reports) feedback to people on what they are doing, using the following framework.

Ray Dalio: Principles

An organization is a machine consisting of two major parts: culture and people. Great people have both great character and great capabilities. Great cultures bring problems and disagreements to the surface and solve them well and they love imagining and building things that haven't been built before. Tough love is effective for

achieving both great work and great relationship. A believability-weighted idea meritocracy is the best system for making effective decisions.

Culture

- Trust in radical truth and radical transparency
 - Realize that you have nothing to fear from knowing the truth.
 - Have integrity and demand it from others
 - Never say anything about someone that you wouldn't say to them directly and don't try people without accusing them to their faces.
 - Don't let loyalty to people stand in the way of truth and the well-being of the organization.
 - Create an environment in which everyone has the right to understand what makes sense and no one has the right to hold a critical opinion without speaking up.
 - Speak up, own it or get out.
 - Be extremely open.
 - Don't be naive about dishonesty.
 - Be radically transparent.
 - Use transparency to help enforce justice.
 - Share the things that are hardest to share.
 - Keep exceptions to radical transparency very rare.
 - Make sure those who are given radical transparency recognize their responsibilities to handle it well and to weight things intelligently.
 - Provide transparency to people who handle it well and either deny it to people who don't handle it well or remove those people from the organization.
 - Don't share sensitive information with the organization's enemies.
 - Meaningful relationship and meaningful work are mutually reinforcing, especially when supported by radical truth and radical transparency.
- Cultivate meaningful work and meaningful relationships
 - Be loyal to the common mission and not to anyone who is not operating consistently with it.
 - Be crystal clear on what the deal is.
 - Make sure people give more consideration to others than they demand for themselves.
 - Make sure that people understand the difference between fairness and generosity.
 - Know where the line is and be on the far side of fair.
 - Pay for work.
 - Recognize that the size of organization can pose a threat to meaningful relationships.
 - Remember that most people will pretend to operate in your interest while operating in their own.
 - Treasure honorable people who are capable and will treat you well even when you're not looking.
- Create a culture in which it is okay to make mistakes and unacceptable not to learn from them
 - Recognize that mistakes are a natural part of the evolutionary process.
 - Fail well.
 - Don't feel bad about your mistakes or those of others. Love them!
 - Don't worry about looking good – worry about achieving your goals.
 - Get over "blame" and "credit" and get on with "accurate" and "inaccurate".
 - Observe the patterns of mistakes to see if they are products of weaknesses.
 - Remember to reflect when you experience pain.
 - Be self-reflective and make sure your people are self-reflective.
 - Know that nobody can see themselves objectively.
 - Teach and reinforce the merits of mistake-based learning.
 - Know what types of mistakes are acceptable and what types are unacceptable and don't allow the people who work for you to make the unacceptable ones.
- Get and stay in sync

- Recognize that conflicts are essential for great relationships because they are how people determine whether their principles are aligned and resolve their differences.
 - Spend lavishly on the time and energy you devote to getting in sync, because it's the best investment you can make.
- Know how to get in sync and disagree well
 - Surface areas of possible out-of-syncness.
 - Distinguish between idle complaints and complaints meant to lead to improvements.
 - Remember that every story had another side.
- Be open-minded and assertive at the same time.
 - Distinguish open-minded people from closed-minded.
 - Don't have anything to do with closed-minded people.
 - Watch out for people who think it's embarrassing not to know.
 - Make sure that those in charge are open-minded about questions and comments of others.
 - Recognize that getting in sync is a two-way responsibility.
 - Worry more about substance than style.
 - Be reasonable and expect others to be reasonable.
 - Making suggestions and questioning are not the same as criticizing, so don't treat them as if they are.
- If it is your meeting to run, manage the conversation.
 - Make it clear who is directing the meeting and whom it is meant to serve.
 - Be precise in what you're talking about to avoid confusion.
 - Make clear what type of communication you are going to have in light of the objectives and priorities.
 - Lead the discussion by being assertive and open-minded.
 - Navigate between the different levels of the conversation.
 - Watch out for "topic slip".
 - Enforce the logic of conversations.
 - Be careful not to lose personal responsibility via group decision making.
 - Utilize the "two-minute rule" to avoid persistent interruptions.
 - Watch for assertive "fast talkers".
 - Achieve completion in conversations.
 - Leverage your communication.
- Great collaboration feels like playing jazz.
 - $1+1=3$.
 - 3 to 5 is more than 20.
- When you have alignment, cherish it.
- If you find you can't reconcile major differences – especially in values – consider whether the relationship is worth preserving.
- Believability weight your decision making
 - Recognize that having an effective idea meritocracy requires that you understand the merit of each person's ideas.
 - If you can't successfully do something, don't think you can tell others how it should be done.
 - Remember that everyone has opinions and they are often bad.
 - Find the most believable people possible who disagree with you and try to understand their reasoning.
 - Think about people's believability in order to assess the likelihood that their opinions are good.
 - Remember that believable opinions are most likely to come from people: who have successfully accomplished the thing in question at least three times and who have great explanations of the cause-effect relationships that lead them to their conclusions.
 - If someone hasn't done something but has a theory that seems logical and can be stress-tested, then by all means test it.
 - Don't pay as much attention to people's conclusions as to the reasoning that led them to their conclusions.

- Inexperienced people can have great ideas too, sometimes far better ones than more experienced people.
 - Everyone should be up-front in expressing how confident they are in their thoughts.
 - Think about whether you are playing the role of a teacher, a student or a peer and whether you should be teaching, asking questions or debating.
 - It is more important that the student understand the teacher than the teacher understand the student, though both are important.
 - Recognize that while everyone has the right and responsibility to try to make sense of important things, they must do so with humility and radical open-mindedness.
 - Understand how people came by their opinions.
 - If you ask someone a question, they will probably give you an answer, so think through to whom you should address your questions.
 - Having everyone randomly probe everyone else is an unproductive waste of time.
 - Beware of statements that begin with »I think that...«
 - Assess believability by systematically capturing people's track records over time.
 - Disagreeing must be done efficiently.
 - Known when to stop debating and move on to agreeing about what should be done.
 - Use believability weighting as a tool rather than a substitute for decision making by Responsible Parties.
 - Since you don't have the time to thoroughly examine everyone's thinking yourself, choose your believable people wisely.
 - When you're responsible for decision, compare the believability-weighted decision making of the crowd to what you believe.
 - Recognize that everyone has the right and responsibility to try to make sense of important things.
 - Communication aimed at getting the best answer should involve the most relevant people.
 - Communication aimed at educating or boosting cohesion should involve a broader set of people than would be needed if the aim were just getting the best answer.
 - Recognize that you don't need to make judgments about everything.
 - Pay more attention to whether the decision-making system is fair than whether you get your way.
- Recognize how to get beyond disagreements
 - Remember: Principles can't be ignored by mutual agreement.
 - The same standards of behavior apply to everyone.
 - Make sure people don't confuse the right to complain, give advice and openly debate with the right to make decisions.
 - When challenging a decision and/or a decision maker, consider broader context.
 - Don't leave important conflicts unresolved.
 - Don't let the little things divide you when your agreement on the big things should bind you.
 - Don't get stuck in disagreements – escalate or vote!
 - Once decision is made, everyone should get behind it even though individuals may still disagree.
 - Set things from the higher level.
 - Never allow the idea meritocracy to slip into anarchy.
 - Don't allow lynch mobs or mob rule.
 - Remember that if the idea meritocracy comes into conflict with the well-being of the organization, it will inevitably suffer.
 - Declare “martial law” only in rare or extreme circumstances when the principles need to be suspended.
 - Be wary of people who argue for the suspension of the idea meritocracy for the “good of the organization”.
 - Recognize that if the people who have the power don't want to operate by principles, the principled way of operating will fall.

- Remember that the who is more important than the what
 - Recognize that the most important decision for you to make is who you choose as your Responsible Parties.
 - Understand that the most important RPs are those responsible for the goals, outcomes and machines at the highest level.
 - Know that the ultimate RP will be the person who bears the consequences of what is done.
 - Make sure that everyone has someone they report to.
 - Remember the force behind the thing.
- Hire right, because penalties for hiring wrong are huge
 - Match the person to the design,
 - Think through which values, abilities and skills you are looking for (in that order).
 - Make finding the right people systematic and scientific.
 - Hear the click: Find the right fit between the role and the person.
 - Look for people who sparkle, not just “any or one of those”.
 - Don’t use your pull to get someone a job.
 - Remember that people are built very differently and that different ways of seeing and thinking make people suitable for different jobs.
 - Understand how to use and interpret personality assessments.
 - Remember that people tend to pick people like themselves, so choose interviewers who can identify what you are looking for.
 - Look for people who are willing to look at themselves objectively.
 - Remember that people typically don’t change all that much.
 - Think of your team the way that sports managers do: No one person possesses everything required to produce success yet everyone must excel.
 - Pay attention to people’s track records.
 - Check references.
 - Recognize that performance in school doesn’t tell you much about whether a person has the values and abilities you are looking for.
 - While it’s the best to have great conceptual thinkers, understand that great experience and a great track record also count for a lot.
 - Beware of the impractical idealist.
 - Don’t assume that a person who has been successful elsewhere will be successful in the job you’re giving them.
 - Make sure your people have character and are capable.
 - Don’t hire people just to fit the first job they will do; hire people you want to share your life with.
 - Look for people who have a lot of great questions.
 - Show candidates your warts.
 - Play jazz with people with whom you are compatible but who will also challenge you.
 - When considering compensation, provide both stability and opportunity.
 - Pay for the person, not the job.
 - Have performance metrics tied at least loosely to compensation.
 - Pay north to fair.
 - Focus more on making the pie bigger than on exactly how to slice it so that you or anyone else gets the biggest piece.
 - Remember that in great partnerships, consideration and generosity are more important than money.
 - Be generous and expect generosity from others.
 - Great people are hard to find so make sure you think about how to keep them.
- Constantly train, test, evaluate and sort people
 - Understand that you and the people you manage will go through a process of personal evolution.
 - Recognize that personal evolution should be relatively rapid and a natural consequence of discovering one’s strengths and weaknesses; as a result, career paths are not planned at the outset.
 - Understand that training guides the process of personal evolution.

- Teach your people to fish rather than give them fish, even if that means letting them make some mistakes.
 - Recognize that experience creates internalized learning that book learning can't replace.
- Provide constant feedback.
- Evaluate accurately, not kindly.
 - In the end, accuracy and kindness are the same thing.
 - Put your compliments and criticisms in perspective.
 - Think about accuracy, not implications.
 - Make accurate assessments.
 - Learn from success as well as from failure.
 - Know that most everyone thinks that what they did and what they are doing, is much more important than it really is.
- Recognize that though love is both the hardest and the most important type of love to give (because it is so rarely welcomed).
 - Recognize that while most people prefer compliments, accurate criticism is more valuable.
- Don't hide your observations about people.
 - Build your synthesis from the specifics up.
 - Squeeze the dots.
 - Don't oversqueeze a dot.
 - Use evaluation tools such as performance surveys, metrics and formal reviews to document all aspects of a person's performance.
- Make the process of learning what someone is like open, evolutionary and iterative.
 - Make your metrics clear and impartial.
 - Encourage people to be objectively reflective about their performance.
 - Look at the whole picture.
 - For performance reviews, start from specific cases, look for patterns and get in sync with the person being reviewed by looking at the evidence together.
 - Remember that when it comes to assessing people, the two biggest mistakes you can make are being overconfident in your assessment and failing to get in sync on it.
 - Get in sync on assessments in a nonhierarchical way.
 - Learn about your people and have them learn about you through frank conversations about mistakes and their root causes.
 - Understand that making sure people are doing a good job doesn't require watching everything that everybody is doing at all times.
 - Recognize that change is difficult.
 - Help people through the pain that comes with exploring their weaknesses.
- Knowing how people operate and being able to judge whether that way of operating will lead to good results is more important than knowing what they did.
 - If someone is doing their job poorly, consider whether it is due to inadequate learning or inadequate ability.
 - Training and testing a poor performer to see if he or she can acquire the required skills without simultaneously trying to assess their abilities is a common mistake.
- Recognize that when you are really in sync with someone about their weaknesses, the weaknesses are probably true.
 - When judging people, remember that you don't have to get to the point of "beyond a shadow of doubt".
 - It should take you no more than a year to learn what a person is like and whether they are a click for their job.
 - Continue assessing people throughout their tenure.
 - Evaluate employees with the same rigor as you evaluate job candidates.
- Train, guardrail or remove people; don't rehabilitate them.
 - Don't collect people.
 - Be willing to "shoot the people you love".
 - When someone is "without a box", consider whether there is an open box that would be a better fit or whether you need to get them out of the company.

- Be cautious about allowing people to step back to another role after failing.
- Remember that the goal of a transfer is the best, highest use of the person in a way that benefits the community as a whole.
 - Have people “complete their swings” before moving on to new roles.
- Don't lower the bar.

Machine

- Manage as someone operating a machine to achieve a goal
 - Look down on your machine and yourself withing it from the higher level.
 - Constantly compare your outcomes to your goals.
 - Understand that a great manager is essentially an organizational engineer.
 - Build great metrics.
 - Beware of paying too much attention to what is coming at you and not enough attention to your machine.
 - Don't get distracted by shiny objects.
 - Remember that for every case you deal with, your approach should have two purposes: move you closer to your goal and to train and test your machine (your people and your design).
 - Everything is a case study.
 - When problem occurs, conduct the discussion at two levels: the machine level (why that outcome was produced) and the case-at-hand level (what to do about it).
 - When making rules, explain principles behind them.
 - Your policies should be natural extensions of your principles.
 - While good principles and policies almost always provide good guidance, remember that there are exceptions to every rule.
 - Understand the differences between managing, micromanaging and not managing.
 - Managers must make sure that what they are responsible for works well.
 - Managing the people who report to you should feel like skiing together.
 - An excellent skier is probably going to be better ski coach than a novice skier.
 - You should be able to delegate the details.
 - Know what your people are like and what makes them tick, because your people are your most important resource.
 - Regularly take the temperature of each person who is important to you and to the organization.
 - Learn how much confidence to have in your people – don't assume it.
 - Vary your involvement based on your confidence.
 - Clearly assign responsibilities.
 - Remember who has what responsibilities.
 - Watch out for »job slip«.
 - Probe deep and hard to learn what you can expect from your machine.
 - Get a threshold level of understanding.
 - Avoid staying too distant.
 - Use daily updates as a tool for staying on top of what your people are doing and thinking.
 - Probe so you know whether problems are likely to occur before they actually do.
 - Probe to the level below the people who report to you.
 - Have the people who report to the people who report to you feel free to escalate their problems to you.
 - Don't assume that people's answers are correct.
 - Train your ear.
 - Making your probing transparent rather than private.
 - Welcome probing.
 - Remember that people who see things and think one way often have difficulty communicating with and relating to people who see things and think another way.
 - Pull all suspicious threads.
 - Recognize that there are many ways to skin a cat.
 - Think like an owner and expect the people who work with to do the same.

- Going on vacation doesn't mean one can neglect one's responsibilities.
 - Force yourself and the people who work for you to do difficult things.
 - Recognize and deal with key-man risk.
 - Don't treat everyone the same – treat them appropriately.
 - Don't let yourself get squeezed.
 - Care about the people who work for you.
 - Know that great leadership is generally not what it's made out to be.
 - Be weak and strong at the same time.
 - Don't worry about whether or not your people like you and don't look to them to tell you what you should do.
 - Don't give orders and try to be followed; try to be understood and to understand others by getting in sync.
 - Hold yourself and your people accountable and appreciate them for holding you accountable.
 - If you've agreed with someone that something is supposed to go in a certain way, make sure it goes that way – unless you get in sync about doing it differently.
 - Distinguish between a failure in which someone broke their »contract« and a failure in which there was no contract to begin with.
 - Avoid getting sucked down.
 - Watch out for people who confuse goals and tasks, because if they can't make that distinction, you can't trust them with responsibilities.
 - Watch out for the unfocused and unproductive »theoretical should«.
 - Communicate the plan clearly and have clear metrics conveying whether you are progressing according to it.
 - Put things in perspective by going back before going forward.
 - Escalate when you can't adequately handle your responsibilities and make sure that the people who work for you are proactive about doing the same.
- Perceive and don't tolerate problems
 - If you're not worried, you need to worry – and if you're worried, you don't need to worry.
 - Design and oversee a machine to perceive whether things are good enough or not good enough or do it yourself.
 - Assign people the job of perceiving problems, give them time to investigate and make sure they have independent reporting lines so that they can convey problems without any fear of recrimination.
 - Watch out for the »Frog in the Boiling Water Syndrome«.
 - Beware of group-think: The fact that no one seems concerned doesn't mean nothing is wrong.
 - To perceive problems, compare how the outcomes are lining up with your goals.
 - »Taste the soup«.
 - Have as many eyes looking for problems as possible.
 - »Pop the cork«.
 - Realize that the people closest to certain jobs probably know best.
 - Be very specific about problems: don't start with generalizations.
 - Avoid the anonymous »we« and »they«, because they mask personal responsibility.
 - Don't be afraid to fix the difficult things.
 - Understand that problems with good, planned solutions in place are completely different from those without such solutions.
 - Think of the problems you perceive in a machinelike way.
- Diagnose problems to get at their root causes
 - To diagnose well, ask the following questions: Is the outcome good or bad, who is responsible for the outcome, if the outcome is bad, is the responsible party incapable and/or is the design bad?
 - Ask yourself: Who should do what differently?
 - Identify the principles that were violated.
 - Avoid Monday morning quarterbacking.
 - Don't confuse the quality of someone's circumstances with the quality of their approach to dealing with the circumstances.

- Identifying the fact that someone else doesn't know what to do, doesn't mean that you know what to do.
 - Remember that a root cause is not an action but a reason.
 - To distinguish between a capacity issue and a capability issue, imagine how the person would perform at a particular function if they had ample capacity.
 - Keep in mind that managers usually fail or fall short of their goals for one (or more) of five reasons.
 - Maintain an emerging synthesis by diagnosing continuously.
 - Keep in mind that diagnoses should produce outcomes.
 - Remember that if you have the same people doing the same things, you should expect the same results.
 - Use the following »drill-down« technique to gain an 80/20 understanding of a department or sub-department that is having a problem.
 - Understand that diagnosis is foundational to both progress and quality relationships.
- Design improvements to your machine to get around your problems
 - Build your machine
 - Systemize your principles and how they will be implemented.
 - Create great decision-making machines by thinking through the criteria you are using to make decisions while you are making them.
 - Remember that a good plan should resemble a movie script.
 - Put yourself in the position of pain for a while so that you gain a richer understanding of what you're designing for.
 - Visualize alternative machines and their outcomes and then choose.
 - Consider second- and third-order consequences, not just first-order ones.
 - Use standing meetings to help your organization run like a Swiss clock.
 - Remember that a good machine takes into account the fact that people are imperfect.
 - Recognize that design is an iterative process. Between a bad »now« and a good »then« is a »working through it« period.
 - Understand the power of the »cleansing storm«.
 - Build the organization around goals rather than tasks.
 - Build your organization from the top down.
 - Remember that everyone must be overseen by a believable person who has high standards.
 - Make sure the people at the top of each pyramid have the skills and focus to manage their direct reports and a deep understanding of their jobs.
 - In designing your organization, remember that the 5-Step Process is the path to success and that different people are good at different steps.
 - Don't build the organization to fit the people.
 - Keep scale in mind.
 - Organize departments and sub-departments around most logical groupings based on »gravitational pull«.
 - Make departments as self-sufficient as possible so that they have control over the resources they need to achieve their goals.
 - Ensure that the ratios of senior managers to junior managers and of junior managers to their reports are limited to preserve quality communication and mutual understanding.
 - Consider succession and training in your design.
 - Don't just pay attention to your job; pay attention to how your job will be done if you are no longer around.
 - Use »double-do« rather than »double-check« to make sure mission-critical tasks are done correctly.
 - Use consultants wisely and watch out for consultant addiction.
 - Create an organizational chart to look like a pyramid, with straight lines down that don't cross.
 - involve the person who is the point of the pyramid when encountering cross-departmental or cross-sub-departmental issues.

- Don't do work for people in another department or grab people from another department to do work for you unless you speak to the person responsible for overseeing the other department.
 - Watch out for »department slip«.
 - Create guardrails when needed – and remember it's better not to guardrail at all.
 - Don't expect people to recognize and compensate for their own blind spots.
 - Consider the clover-leaf design.
 - Keep your strategic vision the same while making appropriate tactical changes as circumstances dictate.
 - Don't put the expedient ahead of the strategic.
 - Think about both the big picture and the granular details and understand the connection between them.
 - Have good controls so that you are not exposed to the dishonest of others.
 - Investigate and let people know you are going to investigate.
 - Remember that there is no sense in having laws unless you have policemen (auditors).
 - Beware of rubber-stamping.
 - Recognize that people who make purchases on your behalf probably will not spend your money wisely.
 - Use "public hangings" to deter bad behavior.
 - Have the clearest possible reporting lines and delineations of responsibilities.
 - Assign responsibilities based on workflow design and people's abilities, not job titles.
 - Constantly think about how to produce leverage.
 - Recognize that it is far better to find a few smart people and give them the best technology, than to have a greater number of ordinary people who are less well equipped.
 - Use leveragers.
 - Remember that almost everything will take more time and cost more money than you expected.
- Do what you set out to do
 - Work for goals that you and your organization are excited about and think about how your tasks connect to those goals.
 - Be coordinated and consistent in motivating others.
 - Don't act before thinking. Take the time to come up with a game plan.
 - Look for creative, cut through solutions.
 - Recognize that everyone has too much to do.
 - Don't get frustrated.
 - Use checklists.
 - Don't confuse checklists with personal responsibilities.
 - Allow time for rest and renovations.
 - Ring the bell
- Use tools and protocols to shape how work is done
 - Having systemized principles embedded in tools is especially valuable for an idea meritocracy.
 - To produce real behavioral change, understand that there must be internalized or habitualized learning.
 - Use tools to collect data and process it into conclusions and actions.
 - Foster an environment of confidence and fairness by having clearly – stated principles that are implemented in tools and protocols so that the conclusions reached can be assessed by tracking the logic and data behind them.
- Ask for heaven's sake and don't overlook governance
 - To be successful, all organizations must have checks and balances.
 - Even in an idea meritocracy, merit cannot be the only determining factor in assigning responsibility and authority.
 - Make sure that no one is more powerful than the system or so important that they are irreplaceable.
 - Beware of fiefdoms.

- Make clear that the organization's structure and rules are designed to ensure that its checks-and-balances system function well.
- Make sure reporting lines are clear.
- Make sure decision rights are clear.
- Make sure that people doing the assessing: have the time to be fully informed about how the person they are checking on is doing, have the ability to make assessments and are not in a conflict of interest that stands in the way carrying out oversight effectively.
- Recognize that decision makers must have access to the information necessary to make decisions and must be trustworthy enough to handle information safely.
- Remember that in an idea meritocracy a single CEO is not as good as a great group of leaders.
- No governance system of principles, rules and checks and balances can substitute for a great partnership.

RPV (resources, processes, values)

Clayton M. Christensen: The Innovator's Dilemma; When new technologies cause great firms to fail

Three classes of factors affect what an organization can and cannot do:

- Resources - (people, product designs, brands, information, cash, relationships with suppliers, distributors and customers).
- Processes - (patterns of interaction, coordination, communication and decision-making). They are formal, informal and cultural.
- Values – they are criteria by which decisions about priorities are made. They are standards by which employees make prioritization decisions.

Company model

Marco Iansiti, Karim R. Lakhani: Competing in The Age of AI; Strategy and Leadership When Algorithms and Networks Run the World

Operational models deliver the value promised to customers. Whereas the business model creates a goal for value creation and capture, the operating model is the plan to get it done. The goal of an operating model is to deliver value at scale, to achieve sufficient scope and to respond to changes by engaging in sufficient learning. So, we can say we have three operating challenges:

- Scale – deliver as much value to as many customers as possible at the lowest price.
- Scope – the range of activities it performs, the variety of products and services it offers its customers. Doing that with centralized R&D organization, warehouse. Investing into brand.
- Learning – the learning function of an operating model is essential to driving continuous improvement, increasing operating performance over time, and developing new products and services.

So, we can structure company model:

- Business model
 - Value creation
 - Differentiation
 - Cost
 - Focus
 - Value capture

- Price
 - License
 - Promotion
- Operating model
 - Scale
 - Volume
 - Complexity
 - Customers
 - Scope
 - Variety
 - Range
 - Learning
 - R&D
 - Continues improvement
 - IP generation

Tom Goodwin: Digital Darwinism; Survival of the fittest in the age of business disruption

When we look on a business-like structure of layers (something like onion), you can see that:

- Communication or advertising is the outermost layer and as such good field to show PR image of changes. This is the edge, the area where companies are really happy to build an image of modernizing with use of technology. But in a lot of cases change stays on the edge.
- Marketing layer is already deeper and here you can already make some impact with changes.
- Product or process layer is the what or how of company, the part of business that represent its reason for existence. Process part include culture and how people are expected to behave.
- Mission is at the core and if changes based on technology can have ability to improve a mission, real changes can happen.

Digital company

Marco Iansiti, Karim R. Lakhani: Competing in The Age of AI; Strategy and Leadership When Algorithms and Networks Run the World

Digital model can be explained with:

- Business model
 - Value creation – exceptional increasing consumer value by personalization and engagement
 - Value capture and sharing – NEM (number of users * user engagement * monetization) across many related markets (multisided).
- Operation model (value delivery)
 - Scale – zero marginal cost network effects
 - Scope – aggregation and modularity across markets
 - Learning – constant innovation and AI/ML driven improvements

Gerald C. Kane, Nguyen Phillips, Jonathan R. Copulsky and Garth R. Andrus: The Technology Fallacy; How people are the real key to digital transformation

Digital cultures are like snowflakes, no two are alike. But just as snow-flakes share a common set of distinct characteristics, digital cultures also share common and distinct traits. Digitally mature organizations are:

- Less hierarchical and more distributed in leadership structure.
- More collaborative and cross-functional.
- Encouraging of experimentation and learning.
- More bold and exploratory, with higher tolerance for risk.
- More agile and quick to adapt.

Building digital culture should be intentional.

The standards for maturity keep changing as technology keep evolving. So, development goes from:

- Exploring digital efforts (early stage)
- Doing digital initiatives (developing stage)
- Becoming digitally mature (maturing stage)
- Being a digital organization (aspirational goal)

Being digital is part of the organization's DNA and not an alternative approach of acting or being. DNA traits can be seen in those spaces:

- Organize: structure, physical space, capabilities and geography.
- Operate: process, technology, talent and governance.
- Behave: policies, rewards, leadership and performance management mechanisms.

Digital DNA Traits that are needed most by organization:

- Continuously innovating
- Real time and on demand
- Shifting decision rights and power
- Modulating risk and security boundaries
- Fluidity
- Geography agnostic
- Morphing team structures
- Intentionally collaborative
- Dynamic skill building
- Changing nature and types of work
- Constant disruption
- Customer centricity
- Democratizing information
- Managing multimodal operations
- Synchronizing ways of working
- Productive mobility
- Changing mix of traditional and nontraditional stakeholders
- Flattening and changing hierarchy
- Nimbleness
- Continuous ecosystem disruption
- Constantly changing decision criteria
- Falling forward, learning faster
- Iterative

Analytical competitor

Thomas H. Davenport, Jeanne G. Harris: Competing on Analytics; The New Science of Winning

Analytical competitors - four common key characteristics:

- Analytics supported a strategic, distinctive capability
- The approach and management of analytics was enterprise-wide
- Senior management was committed to the use of analytics
- The company made a significant strategic bet on analytics-based competition

Without a distinctive capability, you can't be an analytical competitor, because there is no clear process or activity for analytics to support. If strategic decisions an organization makes are intuitive or experience based and cannot be made analytically, it wouldn't make sense to try to compete on statistics and fact-based decisions.

Four pillars of analytical competition are:

- Distinctive capability
- Enterprise-wide analytics
- Senior management commitment
- Large-scale ambition

Senior commitment is probably the most important, since it can make other possible.

Five stages of analytical competition:

- Stage 1 – Analytical impaired
- Stage 2 – Localized analytics
- Stage 3 – Analytical aspiration
- Stage 4 – Analytical companies
- Stage 5 – Analytical competitors

Most of stage 5 organizations were information-intensive service firms.

Key elements of analytical capability:

- Organization
 - Insight into performance drivers
 - Choosing a distinctive capability
 - Performance management and strategy execution
 - Process redesign and integration
- Human
 - Leadership and senior executive commitment
 - Establishing a fact-based culture
 - Securing and building skills
 - Managing analytical people
- Technology
 - Quality data
 - Analytic technologies

[Webpage](#)

Dave Conklin: Lost At 30,000 Feet; A Business Leader's Guide To Understanding & Navigating The Complicated Digital Business Growth Landscape

Here is an example how page could look like

- Section One - the page your visitor's see immediately has to answer a lot of their questions:
 - Who are you?
 - What do you do?
 - Why should the visitor care?

Just use the right elements in the right spots.

- Your Logo. The upper-left hand corner is prime web design real estate because that's where most of your visitors will look first.
- Navigation Menu with CTA. Another common web design pattern is to have the navigation menu written across the top header.
- What Your Company Does. Let's get down to business. You only have a line or two to explain succinctly what your company does.
- Value Statement. Here's where you explain why you're the best choice and why your visitors should care about you.
- Call to Action. Now that your visitors know what your company is about, throw out a couple CTAs as suggestions for how to proceed on your site.
- Section Two
 - Client Logos. A logo is worth a thousand words. Rather than saying "we've worked with them", show their logos instead.
 - Powerful Testimonials. Include one or two of your best testimonials to elaborate on how your past clients appreciate your work.
- Section Three
 - Benefits and Features. Here you show three specific benefits or features you offer. We recommend this setup:
 - Your first benefit should be about making or saving money. (That's what most visitors are looking for anyway).
 - Your second benefit should be about saving time.
 - Your third benefit should be about relieving stress.
 - Call to Action. You'll want to repeat your CTAs throughout your web page.
- Section Four
 - Feature Video.
 - Call to Action.
- Section Five
 - Get Started (Steps). A certain type of visitor will want to know what to expect when working with you before signing up.
 - Call to Action.
 - Confidence Statement. Here's the ideal place to show an impressive statistic about yourself. Typically, the confidence statement covers:
 - How many people you've helped?
 - How many products you've sold?
 - How much money you've made yourself or others?
- Section Six
 - Client Reviews. Here's where you show the full - quote testimonials from your clients.
- Section Seven
 - Unseen Concern. Otherwise known as the "fear statement", this area should play into the sales tactic of pain avoidance. In a bulleted list, show the visitors what they'd miss out on:
 - They'd fail to get a job done.
 - The job would get done with less quality.
 - The job would take too long.
 - The job would cause them too much anguish.
 - Call to Action.
- Section Eight
 - Value Statement. Just like in the first section, you want to explain your value clearly.

- Call to Action. Include your final CTAs here, again to guarantee the people who scroll to the bottom of the page see them.

Data

General

Francis Buttle: Customer relationship management; Concepts and technologies – second edition

Data should be correct and there should be no missing data. Steps in ensuring accurate data are:

- Source the data
- Verify the data
- Validate the data
- De-duplicate the data
- Merge and purge data from two or more sources

Data should be STARTS:

- Shareable
- Transportable
- Accurate
- Relevant
- Timely
- Secure

Data warehouses are repositories of large amounts of operational, historical and other customer-related data:

- Subject-oriented
- Integrated
- Time-variant
- Non-volatile

A data mart is a scaled down version, or subset, of the data warehouse customized for use in a particular business function or department.

There are three ways to get analytical view on data: standard reports, database queries and data mining. Standard report is generated periodically. OLAP allows drill down into data. Data mining in CRM context is the application of descriptive and predictive analytics to support the marketing, sales and service functions. Data mining can find associations, sequential patterns, you can use classifying, clustering and you can make predictions.

A set of principles that has served as foundation for personal data protection legislation around the world:

- Purpose specification
- Data collection processes
- Limited application
- Data quality
- Use limitation
- Openness
- Access

- Data security
- Accountability

Rights of user are:

- Notification
- Explanation
- Correction/deleting/blocking
- Objection

Terminology

Caroline Carruthers, Peter Jackson: Data-driven business transformation; How to disrupt, innovate and stay ahead of the competition

Some of the important terms of data-driven journey are:

- Analytics
- Assurance – activities to measure confidence in a given process, framework or data set
- Audit
- Big data
- Compliance
- Data
- Data architecture – a discipline focused on the models and policies that describe how data is structured, looked after and used
- Data cleansing
- Data dictionary – a catalogue and definition of all data elements
- Data governance
- Data lake
- Data lineage – describes where the data comes from, what happens to it and where it moves over time, often mapped between systems, applications or data stores
- Data migration
- Data warehouse
- Digital – the electronic technology that generates and processes data
- Enterprise architecture – made up of four architectures: application, business data and systems. This is practice for analyzing, designing, planning and implementing enterprise-wide changes.
- Information
- Information architecture
- Master data – a single source of common data used across multiple processes
- Master data management
- Meta data – data that provides information about other data; such as how long it is valid for, where, when and how it was created.
- Stakeholders

Data process

Kirill Eremenko: Confident Data Skills; Master the fundamentals of working with data and supercharge your career

The Data Science Process has five stages:

- Identify the question.
- Prepare the data.
- Analyze the data.
- Visualize the insights.
- Present the insights.

Business intelligence is not the same as data science. It doesn't carry detailed investigative analyses on the data, it simply describes what has happened, in a process that we call "descriptive analytics". If we look at analytic value escalator, we can estimate four stages:

- Descriptive analytics: What happened?
- Diagnostic analytics: Why did it happen?
- Predictive analytics: What will happen?
- Prescriptive analytics: What should we do?

Data models

Caroline Carruthers, Peter Jackson: Data-driven business transformation; How to disrupt, innovate and stay ahead of the competition

Carruthers and Jackson data model consist of:

- Purpose
 - Strategy
 - Governance
 - Risk
- People
 - Skills
 - Behavior
 - Leadership
- Method
 - Policies
 - Framework
 - Organization
- Tools
 - Technology
 - Metrics
 - Architecture

Layers

Caroline Carruthers, Peter Jackson: Data-driven business transformation; How to disrupt, innovate and stay ahead of the competition

We have four layers in DIKW pyramid in business: data, information, knowledge and wisdom. Data literacy sits across the top end of data layer, through information layer into the lower parts of knowledge layer. Information layer is about three Cs (collated, curated and contextual data).

Layer 1 – data – is about raw data, about operational technology.

Layer 2 – information, 3 Cs - this layer is managed.

Layer 3 – knowledge – where subject matter experts sits, those with domain knowledge.

Layer 4 – wisdom – where insights are being used to create body of wisdom to run the business

Data-driven transformation

Caroline Carruthers, Peter Jackson: Data-driven business transformation; How to disrupt, innovate and stay ahead of the competition

Seven elements do data-driven business transformation are:

- Change should be dynamic and continuous
- It will deliver a fundamental shift in culture
- It will need a particular form, style and leadership
- Will move away from focusing on technology and digital with a growing focus on data
- Will need right skills
- Will demand from organizations to know their starting point
- It will be about people

The winners will be using data to drive change, transform and build the future.

Data-based marketing

Bjorn Bloching, Lars Luck, Thomas Range: In Data We Trust, How Customer Data Is Revolutionizing Our Economy

With rise of data-based marketing approaches, many borders are disappearing, one of them is difference between online and offline retailers. Real potential for growth is in the convergence of e-commerce, social shopping, online payment systems, cloud applications and the very physical shopping world in city centers and shopping malls. Goods follow data. The key to success here is that marketers compare individual customers' characteristics with the logic of known consumer segments and derive their product suggestion from combination of the two. Behaviour beats context. Companies target groups in their marketing efforts. Real-time analysis will become the killer app. The fine art of marketing in a cloud economy will consist of hybridizing data from consumer segments, individual behaviour and location.

Marketing guys can analyze everything: from values, needs, preferences to price elasticities. User data are usually scattered around different databases. In order to link them intelligently, we need time, intelligence and computing power.

Two sort of data matters:

- data about behavioural drivers - demographics, psychographics, needs
- data about the customer's actual behaviour – information search (passive and active), response behaviour to marketing, advice, conclusion, usage, buying additional products, complaints/customer services, recycling, purchase history.

When looking at behavioural data, we need to observe also things that are not seen – like competition purchasing, complaints to friends.

Goals that are underlying data-based approaches to market potential are:

- Obtaining an improved understanding of customer value through whole lifecycle – CLV.
- Obtaining whole market picture.

CLV – Customer potential (gross profit) x share of wallet x duration of customer relationship + value of recommendations – cost of keeping customer loyal. Customer value is calculated from revenue (discounted on time basis) minus the cost of acquisition and retention (discounted on time basis). We need to take into consideration also cross-sell and up-sell potential and ability of customer to bring new customers through recommendation. Researching customer behaviour is not a black magic. Companies need to analyze customer interactions all along the customer journey.

Proper framework for marketing activities on individual basis is:

- Identify the market (potential) on the level of the individual customer.
- Increase share of wallet of the individual customer:
 - Sales optimization in customer existing product category – up-sell
 - Ousting the competition
 - Substitution of spending on other products
- Customer retention – increasing length of customer relationship
- Increase customer recommendation
- Lower marketing cost, increases ROMI

Getting to know customer better, predicting demand via »predictive modeling« that uses internal and external data, optimizing logistic, range and price with the use of acquired data. This is what turns retailer into what Tom Davenport calls an »analytical competitor« - a market player who builds his strategy and growth on the intensive use of data. In the era of ubiquitous computing intelligence and an economy based on cloud computing, the marketing mantra will be to use customer data wherever it is. And customers will also appreciate the strengths of all sales channels.

Management

Strategy development

Clayton M. Christensen, Michael E. Raynor: The Innovator's Solution; Creating and sustaining successful growth

There are two main strategy development processes:

- Deliberate
- Emergent

The deliberate is conscious and analytical. If three conditions are met: the strategy must encompass and address correctly all of the important details required to succeed, strategy needs to make sense to all employees and intentions must be realized with little influence from outside. The deliberate strategy process should be dominant once a winning strategy has become clear.

Emergent strategy bubbles up from within the organization. It is the cumulative effect of day-to-day prioritization and investment decisions made by middle managers, engineers, salespeople and financial staff.

emergent processes should dominate in circumstances in which the future is hard to read and in which it is not clear what the right strategy should be.

Decision making

Decision making models

Mikael Krogerus, Roman Tschappeler: The Decision Book; Fifty models for strategic thinking

Decision making models fulfil the following criteria: they simplify, they sum up, they are visual, they are methods.

Improving our self

The Eisenhower matrix:

How to work more efficiently. Define activities based on important and urgent matrix.

Important, but not urgent (decide when you will do it)	Important and urgent (do it immediately)
Not important, not urgent (do it latter)	Not important, but urgent (delegate to somebody else)

The SWOT analysis:

Based on Stanford University study from the 1960s.

Strengths	Opportunities
Weaknesses	Threats

The BCG box:

In 1970s developed by BCG to assess investments. Estimation is done based on market growth and relative market share.

Question marks (or problem children) High growth, low market share. Tough decision, lot of support needed to be turned into stars.	Stars High growth, high market share. Hope is that stars will turn into cash cows. These are investment opportunities
Dogs Low growth, low market share. Only keep if they have some other value. If not liquidate.	Cash cows Low growth, high market share. They should not cost a lot, but promise high return. Milk them.

The Project portfolio matrix:

You always have several projects that run in parallel, so it is important that you define their priorities. If you want to check where you are you can do cost and time matrix. If you want to see how they are improving you, you can check based on how much you are learning from them and how much they support your overall vision.

The Feedback analysis:

Peter Drucker suggested method of writing down expectations and check their realization in one year, to see what kind of gaps there will be and to learn about your ability to predict.

The John Whitmore model:

Gives you answer if you are pursuing the right goal.

S	Specific		THE RIGHT GOAL	C	Challenging
M	Measurable	P	Positively stated	L	Legal
A	Attainable	U	Understood	E	Environmentally sound
R	Realistic	R	Relevant	A	Agreed
T	Time-phased	E	Ethical	R	Recorded

The Rubber Band model:

It is based on questions: What is holding me and what is pulling me?

The Feedback Box:

Dealing with other people compliments and criticism.

Advice (I thought it was good, but it still needs to change)	Compliment (I thought it was good and it can stay as it is in the future)
Criticism (I thought it was bad and it has to change)	Suggestion (I thought it was bad, but I can live with it)

The Yes/No rule:

The Yes/No rule is based on clear parameters.

The Choice overloads:

More is difficult. You should aim for sweet spot between too much and not enough choice. Having no options makes us unhappy. So, does having too many options.

The Gap-in-the-market model:

Model uses three axes to help position competitions according to those three axes, that can represent everything important for certain industry.

The Morphological Box and Scamper:

Innovation can mean doing something completely new, but it can also mean making a new combination of things that already exist. Morphological boxes – new entity is developed by combining the attributes of a variety of existing entities. Scamper checklist – seven questions: substitute, combine, adapt, modify, put to other use, eliminate and reverse.

The Gift Model:

Two axes, how expensive gift is and how valuable is.

Thinking outside the box:

Creating really innovative idea, with going outside our comfort zone.

The Consequence Model:

We are often forced to make decision based on limited information. Even making no decision is decision. If you decide to do so, communicate that clearly.

The Theory of Unconscious Thinking:

Intuition is knowledge that we feel but cannot explain. Unconscious is better at sifting through large amounts of data.

The Stop Rule:

There are two variants of the Stop Rule: non-negotiable and the one with the flexible limit. The Stop Rule is a hard-and-fast, almost universally applicable alternative to the often-tortuous process of weighting up a situation.

The Buyer's Decision Model:

Establish a research strategy. Lower your expectations. Don't worry. Let somebody else decide.

How to understand yourself better

The Flow Model:

Mihaly Csikszentmihalyi - Happiness or "flow" occurs when we are:

- intensely focused on an activity
- of our own choosing, that is
- neither under-challenging (bore out) not over-challenging (burnout), that has
- a clear objective, and that receives
- immediate feedback.

The Johari Window:

What do others know about you, that you don't know about yourself. It is a model of self-awareness. It is based on relationship what you know about yourself and what others know about you.

What you know about yourself and want to reveal to others	What you don't know about yourself but others do
What you know about yourself, but you don't want to reveal to others	What you don't know about yourself and others also don't know (suppressed)

The Cognitive Dissonance Model:

There is usually big gap between what we think and what we do. Our actions are not consistent with our beliefs. Term cognitive dissonance was used by Leon Festinger.

The Unimaginable Model:

We often believe so strongly in models, that they take on the status of reality. Model is based on relationship between imaginable and unimaginable on one line and provable and unprovable on other.

The Uffe Elbaek Model:

If you want to gain a general understanding of yourself or others, that model is great public opinion barometer. You estimate yourself on couples like are you a team player or individual. Are you a body or a brain type of person? Are you global or local player? Are you a format or content player?

The Energy Model:

Are you living in here and now? Estimation about what are you driven from. Memory driven? Dream driven? Or reality driven? You can't change the past. But you can ruin the present by worrying about the future.

The Political Compass:

Where do you stand in political field – authoritarian or libertarian; left or right.

The Personal Performance Model:

How to recognize whether you should change your job. Model has three categories: have to, able to, want to. You estimate your work based on them and see what tasks are being imposed to you, do they match your capabilities and do you want to do them.

The making-of Model:

If you want to plan your future, you should check how your past developed. Model was created by The Grove consulting agency. It consists of five categories you need to check: your goals, what you learned, obstacles, successes and people.

The Personal Potential Trap:

Model shows three curves: my own expectations, the expectations of others and my achievements. If they diverge too much, you will fall into the personal potential trap.

The Hard Choice Model:

Approaches to decision making based on consequences of decision and comparability of the options.

High comparability, low consequences (No-brainer)	High comparability, high consequences (Big choice)
Low comparability and consequences (Apple/Pear decision)	Low comparability, high consequences (Hard choice)

Cognitive Bias:

The four mistakes we make in our thinking: the anchor effect, the confirmation error, the availability error and the fast/slow error. All of them should be estimated based on: assumption, reality and solution.

The Crossroads Model:

Where have you come from? What is really important to you? Which people are important to you? What is hindering you? What are you afraid of? Based on that you can have: the road back, the familiar road, the road not traveled, the dream road, the beckoning road and the sensible road.

How to understand others better

The Rumsfeld Matrix:

Risk is what remains after we think we've thought about everything. Model used by Donald Rumsfeld based on two categories known and unknown, creating fields: known knowns, known unknowns, unknown knowns, unknown unknowns.

The Swiss Cheese Model:

Everyone makes mistakes. Some learn from them and some repeat them. There are different types of mistakes: real mistakes, black-outs and slip-ups. There are several levels on which mistakes occur: skill-based, rule-based and knowledge-based. Factors contributing are: people, technical provisions, organizational elements and outside influences.

The Maslow Pyramids:

Things we want most are what we need least. When you are comparing Maslow needs, with what we want, the pyramid is usually turned upside down.

The Sinus Milieu and Bourdieu Models:

Our origins are our future. The Sinus Milieu psychographic method is used for establishing socio-cultural groupings. It is based on social status and orientation graph. Bourdieu model is based on economic and cultural capital graph. You should ask yourself where do you position yourself, where are your parents and where do you want to be?

The Double-loop learning Model:

Observing observers. Trying to break our own patterns. Reflecting on our actions. Model, or better technique, is based on work of Heinz von Foerster and Niklas Luhmann.

The AI model:

Appreciative Inquiry – AI. Based on constructive or destructive estimation and positive or negative approach, you can be either Fault Finder, Dictator, Schoolteacher or AI thinker (positive and constructive).

The Pareto Principle:

Small number of high values contribute more to the total than a high number of low values.

The long-tail Model:

Mass market wants best-seller, but there is also demand for niche products. Individual demand may be low, but collectively the niche products are worth more than the best-sellers.

The Conflict Resolution Model:

You can either: flight, fight, give up, evade responsibility, compromise or reach consensus.

The Black Swan Model:

This is rejection of cause-and-effect principle. Nassim Nicholas Taleb idea that we can't predict future based on past. When unexpected events happen (black swan), afterwards you can see that you should see them coming. And they move from unimaginable to granted.

The Chasm – The Diffusion Model:

Model of how some ideas, innovations are accepted and others no.

“First they ignore you, then they laugh at you, then they fight you, then you win.” Mahatma Gandhi

The Black Box Model:

Why faith is replacing knowledge. Our world is getting more complicated all the time. Complexity and speed of changes is increasing. In the future it will be the norm to convince people with images and emotions, rather than with arguments.

The Prisoner's Dilemma:

Trust issue. Two prisoners. If they both opt for obvious solution, to trade other for them self, both will get high penalty, if they do nothing, they will get middle and if only one trade other, the one trading will get nothing and the other will get maximum penalty. What would you do?

How to improve others

The Team Model:

When you are setting up your team, first check what skills, expertise and resources you need to do the job and then define what level is needed for all of them and choose your team based on that.

The Hersey-Blanchard Model (Situational Leadership):

How to successfully managed your employee. Instructing, coaching, delegating and supporting.

The Role-playing Model (Belbin & De Bono):

How to change your own point of view. Seven hats of the Bono: white – analytical, red hat – emotional, black – critical, yellow – optimistic, green – creative, blue – structured. Belbin – nine profiles of people: Action oriented – doer, implementer, perfectionist; communication oriented – coordinator, team player, trailblazer; knowledge oriented – innovator, observer and specialist.

The Result Optimization Model:

Each project should be finished three time. First is a draft plan, then refinement and at the end optimization.

The Project Management Triangle:

Why perfection is impossible. Everybody wants good, cheap and fast. In the intersection of all is impossible. Good and cheap is slow. Good and fast is expensive. Fast and cheap is bad. You can only have two.

The Drexler/Sibbet Team Performance Model:

How to turn a group into a team. Development moves in seven steps: orientation, trust building, goal clarification, commitment, high performance and renewal. Up until commitment is creating phase, from then on is sustaining.

The Expectation Model:

Our level of satisfaction increases with expectations, up to a certain point. Over-the-top expectations dampen our happiness.

3E Framework

Andrew D. Banasiewicz: Evidence-Based Decision-Making; How to Leverage Available Data and Avoid Cognitive Biases

The Empirical & Experiential Evidence (3E) Framework is an attempt to give management practices operational framework. It sees operational data at its core, but also see theoretical research informationally valuable. The 3E process begins with within-source steps: identification of distinct sources, then assessment of available and applicable data, and aggregation of type-specific evidence; then you move to cross-source steps defining weights, agglomeration and then incorporation of evidentiary conclusion into the decision-making process. As mentioned, every informational source on it owns can be imperfect, so we use informational triangulation, to come to better conclusions.

Schema of 3E:

Meta-Category	Category	Sub-Category	Insight Extraction	
Empirical	Operational Data	Transactional details	Probabilistic analyses	Exploratory
		Communication details		Confirmatory
		Descriptive attributes		
	Theoretical Research	Observational Studies	Thematic Analyses	Systematic reviews
		Experimental Studies		Meta-analyses
		Research Summaries		
Experiential	Aggregate Experience	Descriptive Norms	Summaries	Standards
		Prescriptive Norms		Means
		Best Practices		
	Expert Judgment	Tasks	Pooling	Assessments
		Processes		Forecasts
		Projections		

Knowledge

Andrew D. Banasiewicz: Evidence-Based Decision-Making; How to Leverage Available Data and Avoid Cognitive Biases

We know three dimensions of knowledge: semantic – which encapsulates abstract ideas and facts; procedural – which captures behavioral abilities to perform specific tasks; episodic – which encompasses an array of hedonic or emotive memories.

We can look at schematics:

- Knowledge
 - Sources
 - Explicit
 - Factual & objective
 - Community-shared & intermittent
 - Exposure, absorption and availability-shaped
 - Tacit
 - Interpretive & subjective
 - Individually-held & constantly accruing

- Exposure, experience and perspective-shaped
- Dimensions
 - Semantic
 - Ideas, facts & concepts
 - Not related to specific experiences
 - Domain-specifics
 - Procedural
 - Behaviors, habits & skills
 - Implicit or unconscious
 - Process-specifics
 - Episodic
 - Events, experiences & emotions
 - Recall-based
 - Context-specifics
- Everything together effective topical knowledge

Types of decision

Mc Kinsey's schema of types of decision:

- Big bet decisions (broad scope, infrequent, unfamiliar)
- Cross-cutting decisions (broad, frequent, familiar)
- Delegated decisions (frequent, familiar (narrow))
- Ad-hoc decisions (narrow, unfamiliar, infrequent)

Matt Mochary: The Great Ceo Within, the tactical guide to company building

The methods to making a decision are as follows:

- Method 1: The manager makes the decision, announces it to the team, and answers questions.
- Method 2: The manager creates (or assigns someone to create) a written straw man (a hypothetical answer designed to inspire discussion), shares it with the team, invites the team to give feedback (written and verbal), facilitates group discussion and determines the final answer.
- Method 3: The manager invites the team to a meeting where the dilemma is discussed from scratch with no straw man. The manager and the team equally share ideas. The manager acknowledges each idea before making a final decision.

The three strategies I recommend CEOs consider during decision - making meetings are writing versus talking, the loudest voice in the room, and the RAPID method.

Turnaround

In order to create turnaround CEO according to Kotter should:

- establish a sense of urgency
- form a powerful coalition of senior executives to lead the execution of change
- create a vision
- communicate a vision
- empower others to execute the plan
- implement short-term wins
- consolidate improvements and continue making changes

- institutionalize new approaches

Thinking

Leonard Mlodinow: Elastic; Unlocking Your Brain's Ability to Embrace Change

The capacity to let go of comfortable ideas and become accustomed to ambiguity and contradiction; the capability to rise above conventional mind-sets and to reframe the questions we ask; the ability to abandon our ingrained assumptions and open ourselves to new paradigms; the propensity to rely on imagination as much as on logic and to generate and integrate a wide variety of ideas; and the willingness to experiment and be tolerant to failure. Author calls it elastic thinking.

Unlike analytical thinking, elastic thinking arises from what scientist call "bottom-up" processes. We can divide ways of thinking in three categories:

- Scripted thinking – on of nature's shortcuts.
- Rational/logical/analytical thinking.
- Elastic thinking.

Analytical reasoning, like scripted processing, often fails to meet the challenges of novelty and change.

Psychological factors that are important for elastic thinking:

- Personality traits
 - Neophilia -the degree of affinity for novelty.
 - Schizotypy – a cluster of characteristics that include a tendency to have unusual ideas and magical beliefs.
- Pattern recognition.
- Idea generation.
- Divergent thinking – being able to think about many diverse ideas.
- Fluency – quickly generating new ideas.
- Imagination.
- Integrative thinking.

Digital leadership

Gerald C. Kane, Nguyen Phillips, Jonathan R. Copulsky and Garth R. Andrus: The Technology Fallacy; How people are the real key to digital transformation

Genotype of leadership is still the same – providing purpose and facilitating collaboration. But phenotype can change, since those fundamental traits will be expressed differently in a digital environment. Core leadership capabilities that are important today:

- Direction: Providing vision and purpose.
- Business judgment: making decisions in an uncertain context.
- Execution: empowering people to think differently.
- Inspirational leadership: getting people to follow you.
- Innovation: creating the conditions for people to experiment.
- Talent building: supporting continuous self-development.

- Influence: persuading and influencing stakeholders.
- Collaboration: getting people to collaborate across boundaries.

Capabilities needed from leaders in digital environment:

- Providing vision and purpose
- Creating conditions to experiment
- Empowering people to think differently
- Getting people to collaborate across boundaries

Leadership in Society 5.0

Bruno Salgues: Society 5.0; Industry of the Future, Technologies, Methods and Tools

New managerial skills will be needed in society 5.0:

- Innovation economy
- Digital writing
- Image
- Artificial intelligence
- Collective intelligence
- Lobbying and influence
- Creating attention
- "Co" planning
- Globalization terminology
- Automated work and robotics
- Competitive intelligence, economic intelligence and mash-up

IT

Amrit Tiwana: IT Strategy for Non-IT Managers; Becoming and Engaged Contributor to Corporate IT Decisions

Non-IT managers can contribute to IT strategy by:

- Competitively exploiting data assets using analytics
- Strategically choosing IT architecture
- Avoiding the Goldilocks trap, ensuring payoffs and investing under uncertainty
- Governing IT to simultaneously be strategic and frugal
- Ensuring that IT projects deliver tangible business benefits and are appropriately sourced
- Securing IT assets and ensuring resilience
- Monitoring emerging technologies to spot business opportunities

W.E.I.R.D. management approach

Charles Towers-Clark: The W.E.I.R.D. CEO, How to lead in a world dominated by Artificial Intelligence

Changing attitudes is hard. It is achieved more easily when things are going badly than when they are going well. Rather than focusing on trying to change attitudes, it is easier to focus on taking steps that result in a change of attitudes. Changes need to start at the top, at CEO level.

Areas where this methodology is focusing on employee levels are recruitment, conflict and dismissal. More time for recruitments, new methods to solve conflicts, with emphasize on individual communication and conflict resolution protocols and if employees are not doing good job, look for what they are good at and try again and if it doesn't improve, do a dismissal quickly.

Transparency in employees' salaries is a hard step to take. Buffer, company who makes clever social media tools, have a formula: benchmark X a cost of living multiplier X a role multiplier X an experience factor. In Pod Group, company of author, they let people choose their own salaries. Estimation is that they overpay by 10% because of that.

Constant evaluation and appraisals are included in everyday work. Not so much as with Ray Dalio approach but regular enough. Teamwork is encouraged. No stars and egos on the team. In the first phase of implementing WEIRD, company stayed with departments, but latter they move to teams, with specified projects.

Improving taking responsibility between employee's demand transparency of sharing information. Also sensitive ones. Company policies are avoided if possible. They don't track holidays, they don't check expenses. They have flexi-hours for working hours. Place of work is flexible. Training is done based on people wishes. Organization focus on tasks rather than roles. Decision can be made by anybody. Any decision. Managers need to refrain from taking control. Strategy is created at the bottom and it stays close to the bottom. Their goals are »Enjoy yourself« and »Make money«.

With implementing self-management as approach, there is always question about managers role afterwards. Author believes that managers have important part in encouraging people forward, liaising between departments and developing structure and frameworks in which other people can soar.

Self-management along the lines of WEIRD is not going to work for majority of companies. Unless it is implemented in full, self-management is a dangerous can of worms to open. Giving people the illusion of self-management whilst not allowing it in reality will only lead to frustration and disappointment and eventually to the departure of good employees.

In process of change luck and culture are important. Business is uncertain and timing is important. If culture is strong, less corporate process company needs. But trust is probably the most important factor. Trust build on honesty, transparency and respect.

Employees

Motivation

Susan Fowler: Why Motivating People Doesn't Work and What Does; The New Science of Leading, Energizing and Engaging

The motivation dilemma is that leaders are being held accountable to do something they cannot do – motivate others. People are always motivated; the question is not if a person is motivated but why.

Understanding what works with motivation starts with appraisal process. That is based on cognition and emotions that lead to well-being of a person that determines intentions and intentions are the greatest

predictors of behavior. If all is developing properly, that leads to employee engagement. Highest form of it is employee work passion, that demonstrates these five positive intentions:

- Performs above standard expectations.
- Uses discretionary effort on behalf of the organization.
- Endorses the organization and its leadership to others outside the organization.
- Uses altruistic citizenship behaviors toward all stakeholders.
- Stays with organization.

You can't motivate people, but you can help them navigate their appraisal process or teach them the skill of motivation. Optimal motivation means having the positive energy, vitality and sense of well-being required to sustain the pursuit and achievement of meaningful goals while thriving and flourishing.

Asking why people were motivated leads to a spectrum of motivation possibilities represented as six motivational outlooks. These are not fixed, you can be in one of them and then pop out and pop in to another one. Outlooks are based on their value representation towards self-regulation on one axis and psychological needs on another.

- Disinterested motivational outlook: you don't find any value in your activity.
- External motivational outlook: it was an opportunity for you to get more power or to gain some advantage for yourself and improve your status with others.
- Imposed motivational outlook: you felt pressured, you were avoiding feelings of guilt, shame or fear from not participating.
- Aligned motivational outlook: you can link activity to significant value, such as learning.
- Integrated motivational outlook: you were able to link it to life or work purpose.
- Inherent motivational outlook: you simply enjoy in it.

The first three outlooks are suboptimal and are considered the junk food of motivation, later three are above optimal and are considered as health food of motivation.

M&A consequences

Dan Hill: Emotionomics; Leveraging Emotions for Business Success

In M&A processes employees react in different ways:

- First up are the winners – those employees most likely to benefit from organizational change and to feel pride at the prospect of an enhanced company identity – for whom some of those seven reasons may come into play. But those reasons will be felt far more strongly by other employees. In addition to the winners, there are three other de facto worker groups that emerge during change.
- The switchers - These high achievers can readily go elsewhere, and may not have the patience for the turmoil and paralysis that come with change. That's especially true if this change seems wrong - headed to them.
- The survivors - These are the employees who will do anything to hold on, for reasons varying from trying to protect a pension to lacking the energy or talent to go elsewhere.
- The losers - Those badly affected by the change may turn into the walking dead because of a loss of hope combined with increased fear or even anger. They can harm the winners, motivate the switchers to go and make the survivors even more bitter. Therefore, this group must be removed from the company ranks as quickly as possible to avoid infecting others with their negativity.

Business development

Surpetition

Edward de Bono: Surpetition; The business formula to help you stay ahead of competition

Surpetition is about creating value monopolies. We have three phases of business:

- First was production driven – making products.
- Second was based on competition – lot of companies providing same products or service.
- The third and current phase is based on integrated values.

The fundamentals of traditional business thinking are:

- Efficiency
- Problem solving
- Analysis of information
- Competition

Competition is about survival, surpetition is for success. In today's value economics, surpetition and value monopoly are very much in the general economic interest. Value economics is concerned with creating opportunities for spending money as you wish.

Value monopolies are established based on:

- Physical Uniqueness
- Technological Uniqueness – patents are an obvious example of value monopoly. In the future application concepts are going to be far more valuable than pure technology.
- Name Recognition
- Dominance – sometimes a corporation gets into a position that is so dominant that it provides surpetition.
- Cost of entry – where cost of entry is high, there is protection for newcomers.
- Brand image
- Segmentation

Some of the reasons are protection based, some are unassailable, others are plus. Surpetition is looking for plus reasons. And companies should look for them too. One of the worst reasons for not doing something is that it might hurt existing business. Surpetition is not so much concerned with differentiating changes in the product being offered as it is by uniqueness in the value being provided. For the plus aspect of surpetition there are three broad sources:

- Integrated values
- Serious creativity
- Concepts R&D

In future every successful organization is going to have three-part strategy:

- Get the housekeeping right
- Develop the concepts for surpetition
- Have an energetic follow-through.

Value creation

Edward de Bono: Surpetition; The business formula to help you stay ahead of competition

When we talk about values, it is important to understand type of them, to have good basis for deliberate valufacture:

- Perceived value – it is the most important value of all, because it is the main driver. There is perceived value that has no real substance, since it is the perception that is being sold. There is perceived value that reflects true value. There is perceived value that reflect true value, but one that is irrelevant to the purchaser.
- Real value – you can only discover it, if you can look for it for some time.
- Gateway value – timekeeping in a watch is only a gateway value to selling jewelry to men.
- Context value – can be very profitable. Can overlap with rarity value.
- Synergy value – the whole is greater than the sum of all parts.
- Security value – it can be important if threshold of price is not exceeded.
- Appeal value – it overlaps greatly with perceived value.
- Fashion value – involve the artificial values of excitement and change.
- Function value – they quickly become commodity values.
- Convenience value

Innovation

Innovation in Society 5.0

Bruno Salgues: Society 5.0; Industry of the Future, Technologies, Methods and Tools

The end of major innovations could have originated due to the fact that it is more complicated to meet the criteria of the society 5.0, which are sustainability, inclusion, efficiency and the power of intelligence. Technology has an influence on the way of life. Innovation will become increasingly related to a philosophy of marketing. Development of innovation can be seen from industrial revolution to mass production and globalization to industrial delocalization. Innovation should be directed towards use scenarios. Innovation is defined as the appearance of the product-service pair, achieving balance between viability, feasibility and desirability. Innovation balance is about:

- Viability
- Feasibility
- Desirability

Intersections between them are: use (viability and feasibility), technology (feasibility and desirability) and value (desirability and viability). Intersection between all is innovation. New forms of innovation in society 5.0 are social innovation and frugal innovation.

Innovator's dilemma

Clayton M. Christensen: The Innovator's Dilemma; When new technologies cause great firms to fail

Principles of disruptive innovations are not to listen to your customer, develop lower-performing products that promise lower margin and aggressively pursue small, rather than substantial, markets.

There is a strategically important distinction between what authors call sustaining technologies and those that are disruptive. The pace of technological progress can, and often does, outstrip what market need. Most new technologies foster improved product performance. They can be called sustaining technologies. On the other hand, disruptive technologies bring to a market a very different value proposition than had been available previously. Disruptive technologies underperform established products in mainstream markets. Disruptive products are simpler and cheaper; they generally promise lower margins, not greater profits. Disruptive technologies typically are first commercialized in emerging or insignificant markets. Leading firms' most profitable customers generally don't want, and indeed initially can't use, products based on disruptive technologies.

Characteristic pattern of decision is summarized in the following:

- Step 1: Disruptive technologies were first developed within established firms
- Step 2: Marketing personnel then sought reactions from their lead customers
- Step 3: Established firms step up the pace of sustaining technological development
- Step 4: New companies were formed and markets for the disruptive technologies were found by trial and error
- Step 5: The entrants moved upmarket
- Step 6: Established firms belatedly jumped on the bandwagon to defend their customer base

There are few principles that you should be aware of when faced with disruptive technologies:

- Resource dependence.
- Small markets don't solve the growth needs of large companies.
- The ultimate uses or applications for disruptive technologies are unknowable in advance.
- Organizations have capabilities that exist independently of the capabilities of the people who work within them. Organizations' capabilities reside in their processes and their values.
- Technology supply may not equal market demand.

Successful managers harness these principles by:

- They embedded projects to develop and commercialize disruptive technologies within an organization whose customers needed them.
- They placed projects to develop disruptive technologies in organizations small enough to get excited about small opportunities and small wins.
- They planned to fail early and inexpensively in the search for the market for a disruptive technology.
- They utilized some of the resources of the mainstream organization to address the disruption.
- When commercializing disruptive technologies, they found or developed new markets.

Innovator's solution

Clayton M. Christensen, Michael E. Raynor: The Innovator's Solution; Creating and sustaining successful growth

Forces that influence managers are:

- Need to move up-market to maintain profit margins.
- The need to satisfy existing customers.
- The forces of commoditization and de-commoditization.
- The mandate to grow from an ever-larger revenue base.
- The fact that the processes and values that define the capabilities of one business model simultaneously define disabilities for other business models.

Structure and conditions that are required for successful growth:

- Starting with cost structure in which attractive profits can be earned at low price points and then carried up-market.
- Being in disruptive position towards competitors so that they will rather flee than fight.
- Starting with non-consumers.
- Targeting a job that customers are trying to get done.
- Assigning managers with right experience.
- Creating environment with processes and values attuned to what needs to be done.
- Having flexibility to respond as a viable strategy emerges.
- Starting with capital that can be patient with growth.

Good theories are circumstances-based. They describe how managers need to employ different strategies as circumstances change in order to achieve the needed results.

Advices to executives:

- Never say yes to a strategy that targets customers and markets that look attractive to an established competitor.
- If your team targets customers who already are using pretty good products, send them back to see if they can find a way to compete against nonconsumption.
- If nonconsumption is not available, look for low-end disruption.
- If the project leader ever uses the phrase: “If we can just get the customer to....”, terminate the conversation.
- If the team’s product or marketing plan focuses on market segmentation whose boundaries mirror your organization’s boundaries or if the targeted market is segmented along the lines for which data are readily available, send the team back.
- If your team’s product improvement road map assumes that the basis of competition won’t change, look at the low end.
- If your disruptive products or service is not yet good enough and your team is pushing for outsourcing and partnering deals, raise a red flag.
- Ask questions about resources, processes and values.
- Ask also the same questions about each of the entities that constitute the venture’s channels as well.
- Maybe you will need to distrust the managers whom you have learned to trust.
- In the beginning years make sure that the development team remains convinced that they aren’t sure what the best strategy is.
- Be impatient for profit.
- Keep your company growing so that you can be patient for growth.

Agility

Baba Prasad: Nimble; Make Yourself and Your Company Resilient in the Age of Constant Change

The Viveking Agility Matrix is estimation based on agility and context sensitivity.

Bear (high context sensitivity and low agility)	Human (high context sensitivity and high agility)
Dinosaur (low context sensitivity and low agility)	Cheetah (low context sensitivity and high agility)

- Dinosaurs are companies that are rich in resources but neither agile or context sensitive.
- Bears are companies that are rich and resources and capabilities but, like the dinosaurs, they are not agile, but they are context sensitive.

- Cheetah are very agile but are context insensitive – they are companies that rely dangerously on a single agility.
- Humans are ideal companies, those with strategic agility, they have multiple agilities and are also context sensitive.

When we talk about agilities, we have five of them:

- Analytical agility – allows a company to change the means and methods of analysis.
- Operational agility – helps the company gain dynamism through its operational resources.
- Inventive agility – enables the generation of new ideas, creative solutions, and alternate uses of resources to solve problems the company has not seen before or to take advantage of new opportunities the company faces.
- Communicative agility – is the skill a company has to persuade its audiences and to convey the value of its ideas through words and speech.
- Visionary agility – allows the company to recognize the long-term impact of the decisions it is making.

Consumption economy

Consumption Economics by J.B. Wood, Todd Hewlin and Thomas Lah

We can all see how business environment is changing around us. Old models that was controlled by strong corporations that build their power on proprietary technologies and control of competition with complex business solutions that lock customers in is under pressure.

One reason why this is happening is presented in the book Consumption Economics, The New Rules of Tech written by J.B. Wood, Todd Hewlin and Thomas Lah. They claim that previous models where customers are willing to take bigger part of risk and cost of transaction was based on customer estimation that future reward is so high on so appealing, that customer were willing to accept enormous risk and vendors were able to achieve high margins and had control in the market. This formula is probably useful for explanation of status of all high growing industries.

But all this led to situation where in IT industry customers were actually proud owner of technology that could deliver much more then they were able to use. Because of that we are now looking at the situation that authors of above-mentioned book interpret as The Consumption Gap. This means that technology companies are adding features and complexity to their products faster then customers have the ability to consume them. Because of that we are faced with growing gap between product potential and its value to customers.

Because of some changes in business environment – mainly more cost sensitive environment due to global crisis, customers started to look for alternatives to old capex-based model where they were taking all the risk. In that time cloud computing and iPhone low cost application models started to grow on corporate and consumer area and that shifted mentality of IT users to better utilise resources and only look for what they need and try to shift risk of success to suppliers.

Suppliers started to work on customer using their solution rather then buying them – no usage, no money. If before it was known that the most expensive place to finish is second (due to high selling cost and no revenue), now it is changing to most expensive place to finish is first (since cost of winning are there but if there is no usage, there is no revenue).

Because of this move of business models, where IT support is not anymore only domain of IT department but customer end users are gaining more and more decision powers, since business requirements are driving demand, and because general development of technology is so high, that some of the strongest companies in IT area are now consumer focused, more and more customer end user are so aware of technology potential that they demand simple, cheap, transaction based pricing solutions.

All this led to strong IT companies coming close to their Margin wall, territory where cost of development and sales of solutions are becoming higher than price.

And that is a changing stone where businesses need to think about new business models and so-called Consumption model, where risk is shifted to producers and they need to fight for customer usage, and they need to bring value with their product to end users in order for them to use their product and pay for it. They can't just sell something to customer at fix price and earn their money on support charges, because consumers are embracing this pay as you use model, producers need to adopt and work with consumers in a different way. Companies that will be successful at this will on a long run earn probably even more.

But in order for companies to be successful in this new reality, they need to adjust their own organisation, they need to adapt in a way that they will embrace micro-transaction, high volume, low pricing environment. They need to build products that will have adjustment capabilities, they need to increase service parts of their companies, use data they will have about customer for better utilisation of their product and their sales department will need to evolve in high skilled, consultative, business oriented, customer focus team.

But in order to do that, they need to clean their "garage" first. Traditional development of new products in technological companies was based on estimation about potential end user requirements and trying to develop a product that could do "everything". This usually led to over developed product with high capability, high targeted utilisation, high price but in reality, very low actual utilisation...which lead into big Consumption gap. And in reality, since companies tend to keep big product portfolio in order to show strength, this leads to situation where 10% of company's product bring 90% of revenue. You need to prioritise, you need to cut products that are not performing, shrinking, you need to focus your development and funds and sales to winners.

So if you want to move away from traditional development and you want to use new technology capabilities you need to develop based on consumption demand, you need to develop your products into multi-layer machines, with built-in capabilities of capacity or functionality upgrade which can be triggered directly by users, so that you can reduce R&D cost, focus them on what customer wants and in doing so you can substantially decrease your time to market. That is called Consumption development.

By launching products into this new consumption driven market, you are getting valuable feedback all the time from launch. In order to use this feedback, you need to create good Listening spots, that could be already part of product. But in order to use information correctly you need to build Consumption research in a proper way. By using proper segmentation, by defining best value practices for consumer, learning proper adoption practises consumer uses, what kind of offer practices work and how consumer reacts to different feature qualities. And then use this research to drive your growth by enabling customer to get what they really need and when they need it, and then charge them for usage.

All this leads to transformation of sales forces at companies, especially at tech companies, since cloud, complexity and risk shift is forcing them to rebuild their sales force. Sales force that would be capable of winning platform sale, selling new consumption-based model to all department from IT to procurement and business and once they do that, they need to continue expanding volumes of transaction by using consumption researches they have.

Why it is important that "new" sales are more business consultants than sales person, since in cost sensitive business environment, new business budgets are usually created by business lines and not cost lines.

One of new methods that "new" sales persons can use in changed environment is called Provocation based selling. You show the problems and you address solutions; you don't talk about your solution; customer ask for it.

And with shift in Sales organisation we also need to adjust whole company structure, since in new model we need to not only sale main platform, we actually want to grow functionality of this platform at customer, since in world of micro-transactions, revenue comes when consumer is using our solutions and not when we plant it into their environment. So in order to increase companies influence into period after initial sales, we need to

transition from traditional model, where sales part of company was finished when contract was sign, and after implementation we only have small support activities, into model where sales is responsible for initial platform sales, but our service guys should take a role of active advocate in the accounts and until we develop complete self-service solutions, move customers into increased usage.

Actually, the whole process of solutions adoption should change so that sellers' main services are used in the beginning and end (purchase and value realisation) of solution adoption cycle and not in the middle (installation, integration, deployment) as it was done before.

In terms of time all these changes are happening, and new Consumption model will be new reality. For companies to adapt to them, they need to estimate how much time they have before they hit Margin Wall and how high this Wall is.

XaaS

Tomas Lah & J.B. Wood: Technology-as-a-Service Playbook

New XaaS offers require a significant investment in multiple areas such as:

- New technology platforms
- New pricing and financial processes
- Revised sales and marketing motions
- New service offerings and capabilities
- Reengineered partner models so that at the same time when revenue declines from our highly profitable legacy offers and we begin to replace them with new subscription offers, additional investments must be made. In B4B, we referred to this phenomenon as “the fish”

As we have studied the XaaS marketplace, we believe there is one defining factor in determining XaaS offer strategy: the profit horizon. Profit Horizon: The length of time targeted to achieve significant GAAP profits. Applying this concept of a profit horizon to XaaS offers in the marketplace, we can easily recognize three common, distinct profiles of XaaS solution providers:

- Future Value Aggregator (FVA). These are XaaS providers that believe the real financial value of the offer will be realized at some date in the distant future.
- Mid - Term Wedge (MTW). These are XaaS providers that expect to achieve profitability in the not-too-distant future (3 to 5 years, or so) selling their core subscription.
- Current Profit Maximizer (CPM). These are XaaS providers that are focused on maximizing the revenue and margin opportunity surrounding their XaaS offers as soon as possible.

Common Behaviors of the Future Vaule Aggregator. Companies in this profile care more about attracting new potential customers than anything else and are willing to do whatever it takes to make that happen — almost no matter what that costs.

Common Behaviors of the Mid-Term Wedge. Companies in this profile have clear signals that their revenue model and product-market fit are valid. Subscription or transaction revenues are consistently trending up each quarter. Cost of goods sold (COGSs) as a percentage of revenue might be beginning to shrink as economies of scale kick in.

Common Behaviors of the Current Profit Maximizer. Companies in this profile either have, or quickly will have, a critical mass of revenue enabling them to pass the wedge inflection point within 1 to 2 years.

Proffer six attributes that will help determine if a XaaS offer can generate strong and consistent profitability.

6 Attribute: Virality and Other Paths to a Low-Cost Sales Model Virality is the concept that a company has a product or service that almost sells itself. There is organic demand for the product.

5 Attribute: Diverse Revenue Streams Most consistently profitable companies have been able to diversify their revenue through multiple offers.

4 Attribute: Network Effect Another economic moat similar to virality is the concept of a network effect. This is the phenomenon whereby a good or service becomes more valuable when more people use it.

3 Attribute: Economies of Scale A powerful economic moat for your XaaS offer can be dug when economies of scale play a significant role.

2 Attribute: Unique Capabilities Of course, something powerful must be said for having a truly unique capability. If a company can do something few others can do, then that company is in a position to create higher-than average profits.

1 Attribute: High Switching Costs The traditional trump card in creating highly profitable tech revenue has been high switching costs for customers.

Some of potential new selling models are:

- Remote Selling Models. Now some enterprise XaaS companies are successfully conducting the entire XaaS subscription sales process without ever going to the customer's site.
- Process - Driven Selling. Hiring less-experienced talent and then teaching and enforcing very tight adherence to a proven sales process.
- Land-Only Sales Teams. The land team and the customer success team. In this model, sales lands. That's what they do. They don't own adopt, they don't own renew and they even don't own most of expand. The adopt/expand/renew team own growing a customer's spending on the offer platform already in use (adding more users, more transactions, more services), but they hand opportunities to land an additional (major) offer platform at that customer to the land team.
- Automated Sales. Everyone has had the experience of buying something or signing up for a subscription on a website. A new and far less-used tactic is to imbed upsell and cross-sell offers that present themselves to the customer directly through the technology. We have seen resistance to this tactic.
- Blended Sales and Service Models. At TSIA, we predict there will be a massive blurring of the historical lines that separated sales from services. You empower service and marketing teams to up-serve the customer by both providing services or information and recommending those new products and services that the employee truly believes would benefit the customer. Service interactions can occur 15 to 20 times more than sales interactions.
- Outcome-Based Selling. Let's face it: Tech has always been a product industry at heart. Selling to business buyers is fundamentally different. They don't want to start the conversation with the product; they want to start the conversation with their business outcomes. Business—not technology— is the new language of sales.

We would recommend the following six organizational changes early in the journey:

- Consolidate portfolio management.
- Identify the key members of your platform infrastructure team.
- Establish a customer analytics team.
- Establish a customer success team.
- Begin planning to migrate renewals away from sales resources you want focused on "land".
- Collapse the service delivery P&Ls.

- Add a chief customer officer (CCO) or chief revenue officer role (CRO). The CCO is looking at the customer experience and the CRO is looking at revenue generation processes. They have high influence but small staffs.
- Redundant functions focused on efficiency should centralize and standardize whenever possible.
- Maximize the ability to share resources across organizational lines.
- Separate long-term focus from short-term focus whenever possible. This is why sales (short-term focus) and marketing (longer-term focus) should not be combined into one organization.
- Leverage proven best adoption practices across regions.
- Expand sell in a cost-effective manner. Educate prospects and customers through marketing in a cost-effective manner.
- Support vertical solutions via outcome engineering and success science.

Your organizations structure. It may look like this after a few years in the XaaS business:

- Land sales segmented by vertical industry (if applicable).
- Customer success segmented by account size.
- Big M marketing:
 - lead generation for sales
 - portfolio management for all the company offers
 - customer analytics that inform offer development and offer success. Success science may live here.
- Global customer growth team.
- Big-picture product development.

Seven exciting offer categories to draw from for your XaaS portfolio:

- Technology Subscription.
- Adjacent Modules.
- Attached Services. This category includes classic service activities such as professional services related to implementation and integration, technical education services and technical support services.
- Operational Services. These are services designed to reduce operational complexity for customers.
- Adoption Services. These are services designed to help customers maximize their usage of technical capabilities.
- Information Services.
- Outcome Services. These are where the provider has some or all of the customer's pricing tied to the delivery of a result.

We suggest you prioritize these 10 practices inside those three segments:

- Enabling Practices –
 - Account Segmentation.
 - Relationship Mapping.
 - Customer On-Boarding.
 - Value Visioning.
 - Benchmarking.
- Monitoring Practices –
 - Adoption Framework.
 - Adoption Monitoring.
 - Adoption Analytics.
- Intervention Practices –
 - Predictive Analytics.
 - Adoption Playbooks.

The economic engine of a XaaS company is typically composed of up to five potential revenue streams:

- Asset Revenue. This is when the customer pays for the right to own and use a copy of the software or hardware product.
- Technology Subscription Revenue. This is when the customer pays for access to technology as a service.
- Annuity Services Revenue. This is when the customer pays for ongoing premium services.
- Project Services Revenue. This is when the customer pays the XaaS provider for specific deliverables such as implementation or user training.
- Transaction Revenues. These are revenues that occur per customer transaction.

Sharing economy

Michael C. Munger: Tomorrow 3.0, Transaction Costs and the Sharing Economy

Lower transaction costs facilitate a hybrid form of “collaborative consumption”. But this more intensive use of existing resources can only happen if transaction costs – the sum triangulation, transfer and trust – convert unused stuff into usable excess capacity.

The notion of a “market” as a means of reducing transaction costs long meant a physical place where people knew to gather to buy and sell. Transaction costs were always present, but mainly as part of product price (together with innovation costs) and lowering them meant being more competitive.

The sharing economy is:

- Entrepreneurship applied to reducing transaction costs rather than reducing production costs.
- Working through new software platforms.
- Operating on smart, portable hardware.
- Connected over web.

Variables that sharing economy is addressing are excess capacity and transaction costs. The middleman economy arises from the ability to sell reductions in transaction costs to enable mutually beneficial exchange in commodities, services and activities that may not even have been conceived as commercial until now. Value proposition in the new economy is selling access to excess capacity.

People own stuff, but in reality, they want stream of services that stuff provided. But they own stuff because owning provide services more reliable and with less cost than renting it. But if entrepreneurs will figure out a way to sell reductions in transaction costs, this will change quickly. So far in order to earn money, people have had to make and sell stuff. From now on making value in economy could come from creating and selling reduction in transaction costs, making better use of stuff that already exists.

Cost of use is called marginal cost. And if you can share something that you are paying some cost (average cost) to own it for marginal cost + some additional cost covering this would bring you benefits. Reason why we are not doing it more is because three elements of transaction costs is so hard to negotiate:

- Triangulation - information about identity and location and agreeing on terms, including price
- Transfer - a way of transferring payment and goods that is immediate and as invisible as possible
- Trust - a way of outsourcing assurance of honesty and performance of terms of contract

Arun Sundararajan: The Sharing Economy, The End of Employment and the Rise of Crowd-based Capitalism

Sharing economy is addressing two major shifts in society. Access without ownership and networks replacing hierarchies. Development of sharing economy is fueled by optimist who believed that it can really change face of capitalism and VC backed companies that are using new business models to gain market share in new market. This duality between ones believing that sharing is real economy and ones believing that it is more "gift" economy can cause some traction but both groups are addressing issue of above mentions shifts. OuisShare is collaborative organization that offers this community chance to meet and explore potential developments. In latest meetings of OuisShare communities more and more VC are present. Equalitarian idea of peer-to-peer business model that was so strong before 2011 is clashing more and more with capitalist request of investment returns for owners of companies that are exploring sharing economy concept.

Author is defining sharing economy with those five characteristics:

- Largely market based
- High impact capital
- Crowd based "networks" rather than centralized institutions or "hierarchies"
- Blurring lines between the professional and the personal
- Blurring lines between fully employed and casual labor, between depended and independent employment, between work and leisure

Some other terms used for this kind of economy are also gig economy, on-demand economy, collaborative economy, crowd-based capitalism. They all are marking difference between hyper consumption and collaborative consumption. Some authors on sharing economy are:

- Rachel Botsman and Roo Rogers use collaborative consumption and define it by set of principles that includes critical mass, idling capacity, belief in the commons and trust in strangers.
- Lisa Gansky is talking about concept of "the Mesh". For her "the Mesh" represent "a type of network that allows any node to link in any direction with any other node in the system. It has five central features: shareability, advanced digital networks, immediacy, promotions instead of advertising, global in scale and potential.
- Alex Stephany is defining sharing economy by value, underutilized assets, online accessibility, community and reduced need for ownership.

Even in definition of sharing economy it is not clear if sharing economy is based on gift approach/purpose driven or market approach/profit driven. Even platforms like Airbnb, Kickstarter, Kiva have elements of gift economy build inside of it. It looks like sharing economy is a hybrid approach using both elements in the best way.

Network economy

Ming Zeng: Smart Business; What Alibaba's success reveals about the future of strategy

Three basic positions in network economy are:

- Point
- Line
- Plane

Points are individuals, or firms, that possess specialized skills but often cannot survive by themselves. Points provide functional services. Lines are firms that combine productive functions and capabilities to create

products and services, often utilizing the services provided by the points and planes. Planes are the platforms that help new lines form and grow by providing infrastructural services and jump-starting point growth.

Line firms provide direct services to clients, much like traditional B2C companies. The core capability of the line as an organization is to coordinate different functions to create a tangible product or service. Lines take advantage of platform infrastructure and other resources to access and coordinate the points that build their own business. The line player must decide to partner with the right platform or plate. Access to, rather than owning, the right resources is what the new line companies seek.

Since 2010 the most valuable companies in the world, such as Alibaba, Facebook and Google, have all based their core products and services on platform. The plane strategy comes with substantial risk, suffers from long and costly incubation periods, and mandates a constant balancing act between the interests of all players on the platform. Planes core value proposition is the matching of buyers and sellers, search users and advertisements, social network users and information. Their income comes from monetizing the matching process. Another concept close to planes are marketplaces.

Marco Iansiti, Karim R. Lakhani: Competing in The Age of AI; Strategy and Leadership When Algorithms and Networks Run the World

Some of the questions everybody should ask before moving into network business are:

- What is the core service delivered?
- What networks are key to providing that service and that what are their characteristics? Do they have strong learning or network effects? Are they clustered?
- If network and learning effects are weak, how do you strengthen them over time? How do you increase the value delivered?
- If the network effects are strong and there is very little value delivered until critical mass, how do we get there?
- What are the most important secondary networks? Can they enable additional network or learning effects?
- Do we have challenges with network clustering? Multihoming? Disintermediation?
- What are the best value capture opportunities?
- Are there network bridging opportunities? Considering the data, you can accumulate from your core network, is it of value to another network?

AI usage

Paul R. Daugherty, H. James Wilson: Human + machine: Reimagining Work in the Age of AI

In human-machine relationship there is a missing middle field where humans and machine are cooperating. If we look at fields each party is taking care of, we can classify them into:

- Human-only activity: Lead, empathize, create, judge
- Human and machine hybrid activities:
 - Humans complement machines: Train, explain, sustain
 - AI gives humans superpowers: Amplify, interact, embody
- Machine-only activity: Transact, iterate, predict, adapt

Companies that are successful already today with use of AI and have moved beyond only automation are following five principles that are connected to their organizational mindset, experimentation, leadership, data and skills (MELDS).

- Mindset – assuming radically new approach with using missing middle, people improving AI and machines give humans more power.
- Experimentation – actively finding potential for testing AI and to actively use reimaged process with use of missing middle.
- Leadership – making a commitment for responsible use of AI.
- Data – building a data “supply chain” to fuel intelligent systems.
- Skills – develop new “fusion skills” in order to enable reimaging processes.

If we would to categorize strengths of human and machines, we could say:

- Human
 - Creativity
 - Improvisation
 - Dexterity
 - Judging
 - Social and leadership abilities
- Machine
 - Speed
 - Accuracy
 - Repetition
 - Predictive capabilities
 - Scalability

AI augmentation and its reshaping of business processes is happening right now, across the three categories of human-machine interaction:

- Amplification - AI gives human data-driven insights, often using real-time data.
- Interaction – AI agents employ advanced interfaces like voice-driven NLP-ing.
- Embodiment – physical realm, AI using sensors, motors and actuators to allow robots to share workplace with humans. Cobots (collaborative robots) are one example.

Amplification activities:

- Matching
 - Match resources, Q&A tasks
 - Automate repetitive or low-level tasks
- Recommending
 - Rank or design alternatives
 - Prioritize resources
 - Automate process change
- Patterning
 - Identify trends in real time
 - Personalize offerings
 - Identify anomalies
 - Categorize and route data
 - Augment strategic decisions

Interaction activities:

- Administering
 - Enable human workers to focus on high-value interactions

- Coaching
 - Nudge the next best action based on domain expertise or corporate policy
 - Accelerate understanding of customer and process context to solve problem
- Conversing
 - Allow for voice-powered access to services and analytics
 - Allow natural-language querying, commands, and sophisticated improvisation during dialogue

Embodiment activities:

- Navigating and extending
 - Self-navigate around humans and autonomous machines
 - Extend sight, hearing or touch
- Collaborating in physical space
 - Assist on very precise, arduous or routine physical work

New business models based on AI use will need new skills. The concept of fusion skills is: abilities for combining strengths of a human and machine to create a better outcome that either could alone. Author identify eight novel fusion skills:

- Rehumanizing time – the ability to increase the time available for distinctly human tasks: interactions, creativity and decision making.
- Responsible normalizing – the act of responsibly shaping purpose and perception of human-machine interaction.
- Judgment integration – the judgment-based ability to decide a course of action when a machine is uncertain about what to do.
- Intelligent interrogation – knowing how best to ask questions of AI, across levels of abstraction, to get insight you need.
- Bot-based empowerment – working well with AI agents to extend your capabilities and create superpowers in business processes and professional careers.
- Holistic melding – the ability to develop robust mental models of AI agents to improve process outcomes.
- Reciprocal apprenticing -performing tasks alongside AI agents so they can learn new skills and on-the-job training for people so they can work well within AI-enhanced processes.
- Relentless reimagining – the rigorous discipline of creating new processes and business models from scratch, rather than simply automating old processes.

AI technologies

Future computed by Microsoft corporation

At Microsoft, we think of AI as a set of technologies that enable computers to perceive, learn, reason and assist in decision-making to solve problems in ways that are similar to what people do.

Key AI technologies include:

Vision: the ability of computers to “see” by recognizing what is in a picture or video.

Speech: the ability of computers to “listen” by understanding the words that people say and to transcribe them into text.

Language: the ability of computers to “comprehend” the meaning of the words, taking into account the many nuances and complexities of language (such as slang and idiomatic expressions).

Knowledge: the ability of a computer to “reason” by understanding the relationship between people, things, places, events and the like. For instance, when a search result for a movie provides information about the cast and other movies those actors were in, or at work when you participate in a meeting and the last several documents that you shared with the person, you’re meeting with are automatically delivered to you. These are examples of a computer reasoning by drawing conclusions about which information is related to other information.

Paul R. Daugherty, H. James Wilson: Human + machine: Reimagining Work in the Age of AI

If we look at AI technology, we can classify it in three layers:

- At core is machine learning, that can be deep or shallow and includes
 - Reinforcement
 - Supervised learning
 - Unsupervised learning
 - Semi-supervised learning
- Then we have AI capacities, what it can do:
 - Knowledge representation
 - Computer vision
 - Natural-language understanding
 - Speech to text
 - Expert systems (inference)
 - Predictive systems
 - Speech and optimization
 - Audio signal processing
- And top layer is AI applications:
 - Intelligent agent
 - Collaborative robotics
 - Biometrics, facial and gesture recognition
 - Intelligent automation
 - Recommendation systems
 - Intelligent products
 - Personalization
 - Text, speech, image and video analytics
 - Extended reality

Thomas H. Davenport: The AI advantage, How to Put the Artificial Intelligence Revolution to Work

There are several different technologies that are all called AI. This can sometimes lead to terminological mess and can cause some complications in communication about usage of AI. In general, we can talk about seven technologies and their usage:

- Statistical mechanical learning – that automates process of training and fitting models to data and it is used for highly granular marketing analyses on big data.
- Neural networks – that uses artificial “neurons” to weight inputs and relate them to outputs and is used for identifying credit frauds and weather predictions.

- Deep learning – which is neural networks with many layers of variables or features, and it is used for voice recognition and extracting meaning from text.
- Natural language processing – that analyzes and understands human speech and text and it is used for speech recognition, chatbots, intelligent agents.
- Rule-based expert systems – is set of logical rules derived from human experts and it is used in insurance underwriting and credit approval.
- Physical robots – that automate a physical activity and are used in factory and warehouses for different tasks.
- Robotic process automation – is automating structured digital tasks and interfaces with systems and is used for credit card replacement, validating online credentials.

AI factory

Marco Iansiti, Karim R. Lakhani: Competing in The Age of AI; Strategy and Leadership When Algorithms and Networks Run the World

AI factory components are:

- Data pipeline
- Algorithm development
- Experimental platform
- Software infrastructure

If the data is the fuel that powers the AI factory, the infrastructure makes up pipes that deliver the fuel and the algorithms are the machines that do the work, then experimental platform controls the valves that connect new fuel, pipes and machines to existing operational systems.

AI revolution

Kai-Fu Lee: AI Super-powers: China, Silicon Valley and the new world order

AI revolution will sweep world in four waves:

- Internet AI – it is largely about using AI algorithms as recommendation engines, setting up preference-based offerings and suggestions. It was first phase of AI implementation, started almost 15 years ago. USA and China are now on 50-50 ratio in this area, with China having better potentials. One of major AI-internet driven companies in China is Jinri Toutiao, news site driven by algorithms.
- Business AI – is a field where companies are utilizing their data to find correlations of certain strong features and certain outcomes. Optimization like this works well in industries with large amount of structured data on meaningful business outcomes. USA has advantage here since companies are more used to usage of standardized ERP and other applications that produce structured data. China advantage in this field could be lack of standardized systems since new technologies can jump over legacy systems and usage of AI could develop directly new business processes and models. Smart Finance company that offers small loans based on algorithm approval is one of companies that used that advantage. RXThinking is another. Using algorithms to make better medical diagnostic. iFlyTek is helping judges to make better decisions.
- Perception AI – this wave gives machines eyes and ears. It is about digitizing the world around us through proliferation of sensors and smart devices. This new wave is bringing OMO (online-merge-

offline). Industries like retail can benefit from those new technologies. Education can benefit. Today all students are forced to learn at the same speed, in the same way, at the same pace and at the same time. Schools take an »assembly line« approach, passing children from grade to grade each year, largely irrespective of whether or not they absorbed what was taught. In-class teaching, homework and drills, tests and grading and customized tutoring are scenarios where AI could be used in order to improve education experience. Services like VIPKid have grown in this field. China has advantage in this area because China is more prepared to sacrifice some privacy for convenience. And balance between personal privacy and public data will benefit China more than USA or Europe. Shenzhen is becoming main hub for hardware manufacturing. One of companies that use this Made-in- Shenzhen advantage is Xiaomi, company that grow from cheap smartphone producer to producer of network of AI-empowered home devices.

- Autonomous AI – represents the integration and culmination of the three preceding waves. Robots today are already automated, but they are not autonomous. But giving machines the power of sight, the sense of touch and the ability to optimize from data, they can perform almost any task. China could actually benefit from their approach that anything is possible and start optimizing infrastructure to new technologies and self-managed devices. Xiong'an is one of those projects, city build to accommodate new technologies.

Digitalization

Caroline Carruthers, Peter Jackson: Data-driven business transformation; How to disrupt, innovate and stay ahead of the competition

Digitization – this is a conversion of analogue information into digital form. It is the starting point of digital journey.

Digitalization – is the actual process of technologically induced change. It is use of digital technologies to change a business model. The use of new platforms to change operating models and drive new revenue or operational efficiencies. In this process you are still really focusing on the tools rather than taking a more holistic approach.

“Digitization has enabled the process of digitalization, which resulted in stronger opportunities to transform and change existing business models. Digitization (the conversion), digitalization (the process) and the digital transformation (the effect) therefore accelerate and illuminate the already existing and ongoing horizontal and global processes of change in society.”²

Amrit Tiwana: IT Strategy for Non-IT Managers; Becoming and Engaged Contributor to Corporate IT Decisions

When we talk about Trifecta, we mean:

- Digitalization – that represent digitalization of a product, service or activity that was previously physical and erase geographical constraints.
- Infusion – baking software into a product, service or business activity, that enable products to become services.
- Ubiquity – omnipresence of cheap Internet connectivity, that helped costless communication to occur at the speed of light.

² Shahyan Khan in the book on page 7

Tom Goodwin: Digital Darwinism; Survival of the fittest in the age of business disruption

Value is different in digital age.

Four ways to change:

- Self-disruption: the riskiest and most aggressive, most potentially rewarding approach. It involves a degree of cannibalism and acting fast, even before you have to.
- Continual reinvention: at what point a startup becomes a legacy business? This is a profound and serious commitment to change.
- Measured bets: less deeply integrated and typically not part of a long-term innovation cycle are those attempts that can sometimes have big effect on core business and sometimes are just small offsets.
- Hedge funds: a significant and increasing number of companies think that their future is best placed in the hands of others. Investing in other businesses looks promising for this sort of approach.

Accounting procedures killed innovation. Big companies are about continuous improvements. They rather wait for startups to do hard work and then buy them. Reality is that many leaders and CEO's don't want to change. Many CEO's are not looking to build their career, they try to round it off. Today companies are shaped by short term share values. News must be managed, risk must be avoided, balance sheet must be guarded.

Digital marketing

Dave Conklin: Lost At 30,000 Feet; A Business Leader's Guide To Understanding & Navigating The Complicated Digital Business Growth Landscape

Some of the important terms in digital marketing:

- KD means “keyword difficulty”. This is rated on a scale from 0 – 100, with 100 being the most difficult to rank for and 0 being the easiest. This is calculated by considering the competitive landscape found in the list of sites that shows up when the keyword is searched for.
- CPC Cost Per Click (CPC) shows the average price that advertisers pay for a click on their ad in Google's paid search results for a target keyword.
- CPS Clicks Per Search (or CPS) is the ratio of clicks to keyword search volume. It shows how many different search results get clicked, on average, when people search for the target keyword.
- SERP means “search engine result page”. Clicking on this for each keyword, you can see the data that was discovered by Ahrefs when doing their research.

Digital maturity

Gerald C. Kane, Nguyen Phillips, Jonathan R. Copulsky and Garth R. Andrus: The Technology Fallacy; How people are the real key to digital transformation

Digital maturity is about balance approach to digital disruption to deal with the changes at hand.

An organization’s culture, people, tasks and structures all occur within a given digital environment, which interacts with these elements; they need to be realigned as this environment changes. Digitally maturing is a flexible process by which the organization can continually adapt to a changing technological environment, realigning its people, culture, tasks and structure in response. Maturity can be defined as the ability to respond to the environment in an appropriate manner. Maturity has five elements relevant to digital environments:

- Maturity is a gradual and continuous process that unfold over time.
- Gradual maturation should not be confused with less significant changes.
- Organizations may not fully know what they will eventually look like when they begin to mature.
- Maturation is a natural process, but it will not happen automatically.
- Maturity is never complete.

Digital meaning should be seen more as an adjective than a noun. It doesn't have distinct identity of its own, but it changes other nouns. Companies can have digital marketing, strategy, talent, leadership or culture.

Digital maturity can be measured as three categories of companies: early, developing and maturing. Digital maturity is not uniform across the organization. A healthy recognition that your organization falls and will always fall, a little short of the ideal is an important element of maturity. A digitally mature mindset recognizes that digital disruption represents both an opportunity for and a threat to your organization and responds appropriately. Action plan for reaching digital maturity should address what process, talent, technology and operating principles need to change, as well as which ones need to remain constant.

A clear and coherent digital strategy is the single most important determinant of a company's digital maturity. David Rogers in his *The Digital Transformation Playbook* argues that digital forces are disrupting five key domains of strategy: customers, competition, data, innovation and value.

Digital strategy is a recursive process of identifying the overall goals of digital business, developing short-term initiatives that get the organization closer to the goal and then rethinking the nature of those goals based on what organization has learned from those short-term initiatives.