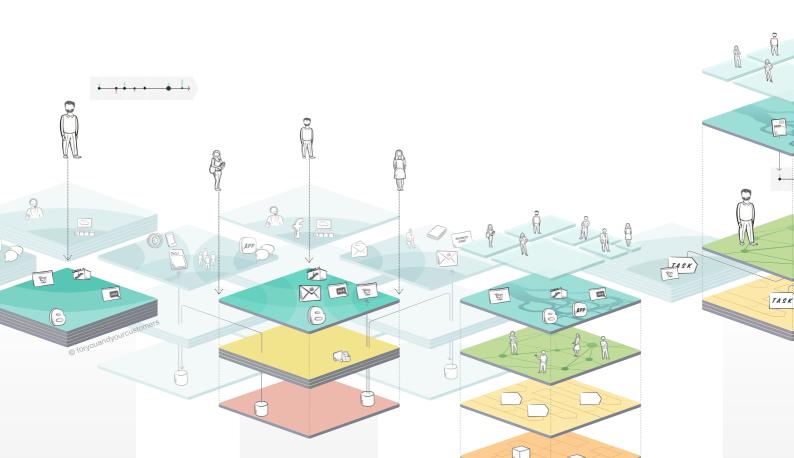
With this whitepaper foryou andyourcustomers presents the "Exploded View" model and offers an overview and tools for contemporary business in our digitalised world.



Exploded View by Jonathan Moeller, Robert Josef Stadler, Axel Helbig, Peter Zwyssig and Stephan Mueller 28 June 2018

Introduction

The fundamental challenges of each individual era can only be resolved using an innovative approach or new insight developed for that particular time. Although their ideas ultimately proved successful or right, many pioneers were initially greeted with hostility for their fresh views of the world. The earth is round and not the at centre of the universe.

What mindset is characteristic of your company? What perspective does your company require to improve how it tackles digitalisation?

Today's leaders are acutely aware that current challenges, often associated with digitalisation, cannot be resolved using traditional models and organisational structures. A new approach and a clear appreciation of reality are lacking.

Rapid developments increase the pressure to resolve these challenges. Indeed, the next wave of technological innovation is already on our doorsteps, even before companies have managed to adopt previous innovations in Internet applications and mobile devices. Developments like the Internet of Things, robotics, artificial intelligence, block-chain, cloud systems, augmented reality, chatbots and others are asking tougher questions of our traditional business models. At the same time, internationalisation with its unpredictable actors is challenging our established cultures, structures, procedures and offerings.

The traditional perspective of the company and the market, which is still taught at many universities, no longer yields a coherent and holistic structure, let alone one that might inform our actions. The challenges have become too complex and can no longer be overcome using methods that are in place today. Quite the contrary: Seemingly insurmountable differences have become entrenched in many companies, with each side insisting that only their frequently understandable but isolated take on reality is correct. Developing a shared understanding and pulling towards the same direction seem impossible.

This is why companies need a better grasp of the increasingly digital world and the deeper, underlying contexts. Leaders and employees require a model that unites the multifarious view of customers, employees, companies, offerings, organisational structures, new technologies and all the other aspects to produce a single, accessible and coherent understanding; an overall view that assists them on their journey through digital (and traditional) transformation.

Exploded View is a model within the Contemporary
Business, a modern philosophy for your company.

This whitepaper presents the Exploded View model. It provides a pragmatic view of companies, markets and customers, and in doing so facilitates smooth collaboration to tackle the challenges ahead. This model is foryouandyourcustomers' contribution to an approach that we call "Contemporary Business".

To which questions does this whitepaper provide answers?

Do you already have answers to these questions in your company?

- What can a company do to rise to the multifarious challenges of digitalisation, for instance in the development of a sustainable customer experience, business model, service offerings, organisational model, employee experience or technology capabilities?
- How can a company organise its operations and projects around customers and their "moments of truth", instead of just chasing its own tail? Especially when the competition is exciting customers with innovative experiences?
- Which models should companies apply to enable interdepartmental collaboration to grow in the same direction (known as a strategy) and become a well-oiled, holistic entity?
- How can new concepts, trends and strategies be defined precisely and quickly, established at the right place in the company and – where useful – integrated in the workflows?
- In which ways can a business model be visualised with new challenges and approaches?
- What can be done to understand the interdependencies in complex companies, for example to organise responsibilities in a more meaningful and simple way?
- How can employees collaborate more transparently, to ensure that each employee makes a meaningful contribution to the company and its customers?
- Which terminology fosters a shared understanding of all projects and activities in the company, and hence reduces the risk of misunderstandings and duplicated activities?
- What are the underlying blueprints to build and grow a company? Do they even exist like those used by an architect to build a house, e.g. a floor plan, schematics, or the plumbing and electricity diagrams?
- How should the company's civilisation adapt to the digital transformation?
- Why are companies that apply Contemporary Business more successful overall?

Which other issues do you need resolved?

Clarity in our digitalised world

Could a standard exploded view of your company offer the same clarity, orientation and simplification as is firmly established within architecture? The Exploded View ensures that the deeper contexts and challenges of digitalisation are made visible and comprehensible for all stakeholders in the company. Using the method ensures that specific tasks can be discussed, addressed and agreed. It is comparable with an architect's exploded-view drawings, which are useful tools that provide a detailed impression of a building's inner life and help to communicate the underlying idea and concept. The exploded view helps all project stakeholders to find their bearings without delay. But other tools are used to create the detailed view: Floor plans, space arrangements, construction methods, static calculations, pathways,

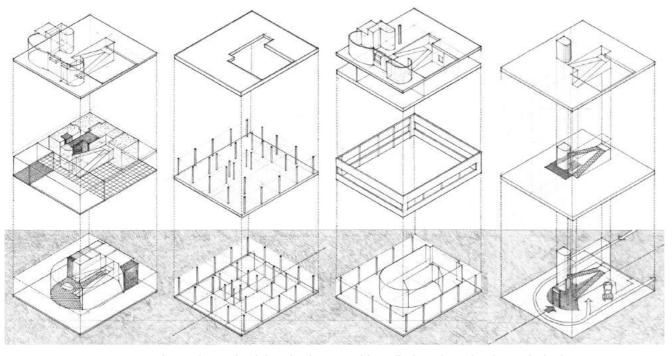


Figure 1:
Drawing by Francis D.K.
Ching, 1979, Villa Savoy,
Paris by Le Corbusier:
Diagram of the
arrangement of space,
construction method,
enclosures and pathways.

schematics, schedules, budgets and installation plans for the technical systems etc.

Our Exploded View is quite similar: Not only does the spatial visualisation provide a clearer overview, it also fosters a better understanding of the idea and the concepts. Furthermore, many details that are created using other tools and can be considered and visualised within the wider context of the Exploded View.

Like many other models, it reduces reality to just a few elements – with the attached pros and cons. But practical experience has shown that the method nevertheless incorporates all of the relevant areas of work. Furthermore, the model is flexible enough to freely choose the relevant focus areas, scopes and depths for any application.

The Exploded View models a company and its market and customers in six layers:

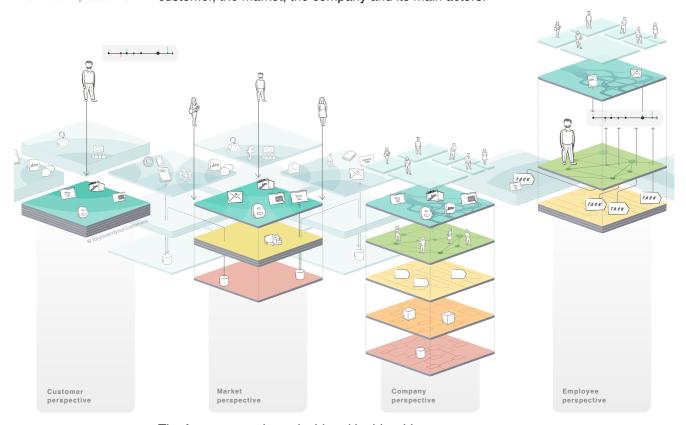
- *Customer Layer:* The customer layer groups all customers. It is is the uppermost layer of the system. We define customers to be all targets groups, so current and potential customers, investors, employees, potential leads and others.
- Experience Layer: The experience layer contains all channels and hence is the company's "interface". It is the basis upon which all user and customer experiences are built. The company is able to control some of the channels, i.e. the ones it owns.
 Other channels can be controlled only indirectly (paid, earned channels) or even not at all (earned, rival and all other channels).
- Organisation Layer: The entire workforce makes up the organisation layer. This layer comprises the organisational structure with all its roles, responsibilities, functions, etc. Through the organisations' people, it is ultimately responsible for customer inter-

action via the experience layer and for the smooth interactions of the company via the layers below.

- Performance Layer: The performance layer represents all the services provided by the company. Each employee contributes a specific performance (solution, product, service) to resolve an issue or to complete a step – automated or manual. A company's performance is equivalent to the aggregated sum of these steps.
- Asset Layer: The asset layer consists of all resources within a company, whether
 they are information systems, real estate (e.g. retail shops at a good location),
 warehouse facilities, logistics, production, IP/know-how, infrastructure, capital, etc.
 These assets and access to them lay the foundation for a company's performance.
- Data Layer: The data layer contains the sum of all data and data structures within a company. Each company operates on the basis of the data it possesses.

Working with the six layers of the Exploded View provides clarity and facilitates collaboration for everyone involved. These layers can be structured and used to generate a variety of perspectives. So far we have identified twelve. We will use this whitepaper to present the first four. Here, each perspective or view enables a separate consideration of the elements and mechanisms inherent to digitalisation. By adopting the different perspectives, viewers acquire a more complete and integrated understanding of the customer, the market, the company and its main actors.

Figure 2: Four of the twelves perspectives within the Exploded View.



The four perspectives elucidated in this whitepaper are:

- Customer Perspective: Understanding customers and their experiences.
- Market Perspective: Understanding how customers and providers interact.
- Company Perspective: Acquiring a detailed and comprehensive appreciation of the company.
- Employee Perspective: Understanding employees and their experiences.

We begin with the customer's perspective, as this will help us acquire a better understanding of the market (as the aggregate product of customers and partners) later on. From there we will use our perception of the company to work out the projects and ac-

Which of these perspectives is particularly helpful for your company? tivities needed to develop the organisation, and then to design smarter and more efficient collaboration within the company from the viewpoint of the employees.

Each perspective, viewed separately, is helpful and is easy to apply individually as well. It is nevertheless advisable to envisage, apply and hence to work with the combined perspectives presented in our Exploded View.

And although the model was built on the challenges that companies face due to digitalisation, it is equally relevant to traditional issues as well. It can indicate, for instance, how the analogue level is dependent on the digital side and, at the same time, how traditional issues can enrich our digital activities. We believe that a strict separation between analogue and digital perspectives has been a futile exercise for years.

The varied use of the Exploded View in a raft of different situations, companies and industries over recent years has ultimately provided a versatile toolkit. The tools it contains provide clarity, enable clear planning and implementation of projects and address the needs of various people and groups: From innovative shapers of the digital agenda to employees that have only been peripherally involved in digitalisation so far.

Combined with the toolkit, the model eases the strain on day-to-day tasks and facilitates collaboration, hence allowing executives to reach more measured decisions. It supports companies in speeding up the learning process and in becoming more agile. In doing so, it helps them to acquire a clearer understanding of their own company and the environment in which it operates.

Numerous companies already use the Exploded View. In many cases the model was integrated in their workflows with only a few adaptations. The tools can be combined in any way imaginable, provided they are deployed as outlined in the Exploded View. Among other things, teams can work simultaneously on different topics to grow the company using a variety of tools. The insight they acquire can then be combined to produce a conclusive whole.

Exploded View offers its users the following benefits:

- By introducing a common language for all stakeholders, its simplicity and comprehensibility enables smooth *collaboration*.
- It provides the clarity needed to see the big picture and to reveal discrepancies.
- The broad *applicability* with multiple perspectives provides more integrated results.
- The consistency lets everyone contribute: From the customer to the data, all the relevant areas are included.
- The toolkit reduces risks, while boosting efficiency and speed.
- Visualisation enables a clear specification of challenges and tasks.
- Its attractiveness appeals to previous bystanders and increases involvement among all stakeholders.

Overall, the Exploded View aims to be the most complete and integrated model for companies. It supports our thinking to act entrepreneurial and with conscience, in line with the Contemporary Business.

Several international companies use Exploded View enterprise-wide. We

couldn't imagine greater

praise.

The toolkit helps users

to page 33 ff.

work with the model; refer

The Exploded View has been updated steadily for six years. Just get in touch if you would like to receive the latest publications.

The Customer Perspective

Are you aware of a company that adds relevant value for its customers but is failing nevertheless?

In many cases a company's chances of success will hinge on improving the customer experiences and the adding value to the customer and the company. It therefore makes sense to begin with the customer, to understand their needs, to question how they are experiencing the company and in doing so to provide a satisfying experience. The Exploded View model is designed for this purpose, and the customer perspective is the first step in enabling these improvements and value adds.

All companies would benefit from developing a feel for their customers. It's easier for small companies, and their customers tend to experience a positive sense of closeness. But understanding customers and remaining close to them is a complex challenge for many bigger companies, whose customers are experiencing increasing alienation due to centralisation, automation and self-absorption. In response, and to avoid losing their customers, these companies frequently invest a lot of money in marketing and branding. But even these measures rarely deliver customer proximity or centricity. Instead, many of them may be missing out on the opportunities that digitalisation provides, namely to acquire a better understanding of their customers to the benefit of both sides.

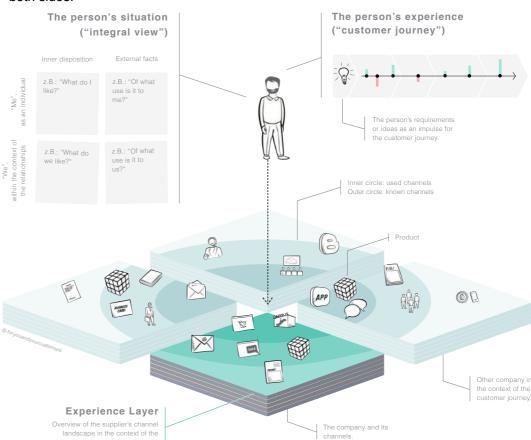


Figure 3: We use the Customer Perspective to analyse the customer, his situation, needs and the customer experience that these factors produce.

When we speak of a customer, besides meaning a specific person, the corresponding product or offering from one or several providers is implicitly included as well. In most cases it will easily be possible to name all three elements: The customer, his needs and the offering. But the more we observe these three elements, the sooner we realise that things are not that simple after all.

The Customer

Although used almost universally, the terms customer or customers are actually quite imprecise. Dividing them into three basic groups is clearer and more helpful:

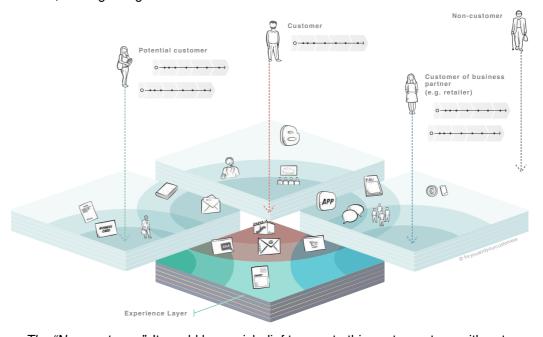
In principle, there are precisely three customer groups for all companies.

- The "Customer": This is the person with whom a business relationship is established or who has already purchased products or services from the company. So former customers also belong in this group. Ideally the company should be able to identify the customer. Customer loyalty programmes are often used to facilitate identification, to obtain more information about the customer and to establish a relationship between the customer and the company. Modern customer loyalty integrates the target group in a digital environment and delivers additional benefits as well (for instance "smart products").

Are you able to communicate with your potential customers?

- The "Potential Customer": This person is not known to the company. He may make purchases from the competition or has not yet discovered the benefits he can acquire from the provider in question. Sales strategies in companies all too often neglect potential customers, although they are frequently the company's greatest opportunity to grow. Especially companies that have been around for decades and have a loyal customer base have often failed to recognise the potential lurking in this customer group. They are at risk of surrendering their grip on the coming generation of customers, leading to a gradual "demise" of their business.

Figure 4: Three customer types: The customer, the potential customer and the non-customer.



Which non-customers could your company easily address and offer value added? - The "Non-customer": It would be a misbelief to equate this customer type with potential customers, as non-customers are uninteresting for companies. They are unable to find any benefits in the company's products and services. Identifying these non-customers in the available data (for instance a "customer database" or "CRM") or even during the customer journey saves companies a great deal of time and money.

Taking an even closer look at customers quickly reveals that they are not just *many*, but above all *different* people. All of them have their individual habits, motives, needs and expectations. They use different ways to interpret their experiences with the various providers.

This variety has grown continuously over recent decades. There is every reason to assume that it will continue to grow along the same trajectory. Internationalisation and multiculturalism are not the only pertinent factors here. Instead, it is the outcome of many different societal developments that have yielded a broader spectrum of preferences, life models, values and life phases etc., thus allowing individuals to emerge.

It is impossible to grasp the sheer diversity of customers. However, it also has been woefully inadequate to speak of "the customers" for some time now. For many companies, the ability to acquire a better understanding of (potential) customers has become a trigger point in numerous growth processes a key to digitalisation. And it doesn't matter at all whether it is a huge multinational or a tiny business. This diversity is good for niche providers – but also for those who can utilise it globally.

Have you noticed the increasing diversity in your business? In what way?

Developing an understanding for customers always begins with their analysis as individuals. The so-called "integral view" (tool: "Integral view of a person") is a good way of understanding the situation. It involves analysing a person using four quadrants with the inner disposition and external facts on the one axis, and the individual ("me") and the collective ("we") on the other. This integral view is comparatively comprehensive and allows a distinction between purchase decisions that are made by gut feeling, reason, with the heart or objectively.

What prompts the customer to buy? If at all, only data analysis is able to answer this question, as the inner attitude (gut/heart) cannot be measured and can only be explored face-to-face. Moreover, a decision to buy is usually informed by several factors: Wife/husband, friends, colleagues at work, rules, conscience, culture and others. That influence is also difficult to measure.

An analysis of several hundred customer journeys consistently uncovered three basic customer roles in decisions to buy:

- the "Buyer" (i.e., the Decider)
- the "Influencer"
- the "Beneficiary"

In principle, all persons that influence a decision to buy can be assigned to these three roles. They may all apply to a single person, which would indicate a strong, independently-minded customer. But almost always - and most certainly in a business-to-business (B2B) context - they are spread over multiple people.

Identifying the correct role is virtually impossible merely by considering one touchpoint alone, or by just analysing purchasing transaction data. The only way for a company to decrypt the assignment of roles is by engaging in a dialogue with the customer about the customers journey. Only then a greater understanding can be acquired.

Customer segmentation (tool: "Customer segmentation") is one of the outcomes of acquiring a better understanding of customer diversity. The classification as "customers", "potential customers" and "non-customers" is in itself an initial segmentation. But the segmentation within these three customer groups differs greatly, depending on the specific company. These and other segmentations – for instance life phases, interests and others – must be elaborated, clearly defined and made understandable internally. Experience has shown that introducing half a dozen segmentations significantly improves customer interaction, both for mass communication within a segment and for personalised interactions.

Within a company, it should be possible to use the various segmentations on their own to accommodate a variety of situations. Where data has been integrated comprehensively at all levels (refer to the Company Perspective), the customer data can be assigned and applied to each segment automatically and dynamically, i.e. up-to-date at all times. Once this capability is introduced, the segments themselves can also be calculated and optimised dynamically. This is an integral part of "Data Driven Business". A customer's touchpoint or a market movement triggers the right process in real time, calculates the right response and leads to an improvement of the algorithm once the results have been reviewed.



Figure 5: Three different roles in each decision to buy.

Is your company familiar with customer segmentation? Do you use it? How can the basic principle of understanding the customer be made to permeate the organisation? A simple and popular tool is known as the "Personas" (tool: "Persona"). Insight about the customer is used to create and visualise six to twelve prototypical customers. They represent a practical reference point to explain concrete activities to grow the company from the consumer's perspective. Included in the personas are matching needs and a suitable offering to satisfy them.

The Need and the Offering

After acquiring a nascent understanding of the customer and his situation, the illustration shows his need, i.e. the idea of his interest, as a light bulb. From an integral perspective, this idea is derived from internal, external, individual and/or collective needs. Put differently: A customer will almost always have several needs. Consciously or unconsciously, he is looking for an offering that satisfies all of them.

This impulse ultimately leads to the customer experience, a.k.a. the "Customer Journey". The journey itself consists of a series of touchpoints or moments on the timeline, in which the customer interacts with a company's channel. When this encounter is positive – i.e. it matches or satisfies a need – the customer will frequently continue his journey with this provider and its channels. In most cases, though, a customer's need is not fully satisfied merely by making a decision to purchase. Instead, the customer journey continues through the phase of use. This may generate additional needs, precipitating a repeat purchase or an endorsement and thus triggering a new journey in a different person.

This is why a detailed analysis of the customer journey should consider several phases: An endorsement by a person we trust is perhaps not the first relevant touchpoint, and the ground could well have been prepared by other positive experiences. The purchase by a customer is not the end point and may indeed represent the begin of a customer relationship. And so on.

A new and more profound understanding of what customers (might) expect of an offering or product emerges through a process of meaningful analysis. It's not just about the physical product, but it always includes the emotion, experience, feeling and confirmation. The sum of experienced touchpoints, the customer experience, is just as much part of the product that the customer is looking for. The overall experience will determine whether he will recommend the product positively or negatively to his friends.

So an offering that is relevant to the customer comprises the individual customer experience, of which the product he buys is merely one part. This is why the customer journey analysis needs to be integrated within product development, and its results must be completely woven into the customer experience.

Regrettably, many companies do not have a clear idea of the customer experience. Very few of them use a standardised process to analyse and document the customer journey, and thus cannot obtain a clear understanding of their customers' experiences. Often, simple basics are lacking, for example a list of relevant customer needs or the channels that the involved companies use.

In the customer perspective, this channel landscape is shown as the experience layer, i.e. the company's "interface". Preparing an overview of the company's proprietary channels and those used by other market players (for instance partner companies, suppliers, competitors) produces a channel inventory (tool: "ChannelCARDS"). This list sheds light on the individual customer journeys. It is used to identify the challenges that these journeys will mean for the company, and it fosters collaboration within the projects in order to improve the offering and therefore the customer experience. The list of

Customers view their entire experience as your offering, not just the product and the price.

Does your company have a list of customer needs that are assigned to the customer segments? a channels is usually significantly longer than even the company expects – mostly there are over 80 channels.



Figure 6: How many channels do your customers use? Check the number based on our list of 129 channels.

Customer behaviour can be modelled in more detail once the channel inventory of the company and the market has been prepared. A distinction is possible for each customer between "used", "known" and all other – so "unknown" – channels. This channel use is shown in the model by two concentric circles at the channel level, i.e. the experience layer. The inner circle contains the used channel, the outer circle the known ones. Outside these circles are the channels that the customer neither uses nor knows – the majority of channels. Each company seeks to ensure that customers are familiar with – and learn to use – the relevant but currently unknown channels. This is a difficult challenge, as people tend to stick to wat they know, reluctant to try new things. Nevertheless, digital channels have proven astonishingly attractive and have convinced many people to change their habits – for their own benefit and for the benefit of companies that introduce these channels early on as relevant elements in their customer experience. That allowed such companies to lure customers away from businesses that use only traditional channels.

The Benefit

Not only does analysing the customer journey (tool: "ChannelOPERA for Customer Journeys") create a better understanding of the customer and his needs, it also reveals innumerable areas in which the company can improve quickly. They should be evaluated, prioritised and documented (tool: "Customer Journey Evaluation").

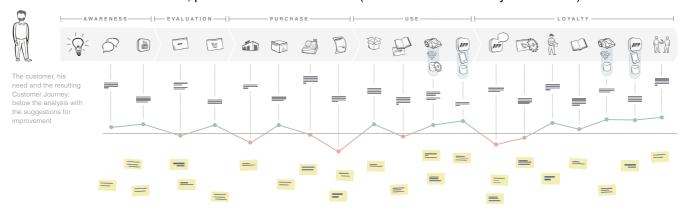


Figure 7: How can a customer journey be analysed and documented in a practical way?

Which criteria can be applied to evaluate the improvements? How can the insight be translated into a functioning roadmap? Ideally, the potential will be processed using the four perspectives in the Exploded View. Companies can use the results to produce a roadmap in the interests of customers, the market, their own well-being and the well-being of their employees.

When working with the customer perspective, it is advisable to generalise the customer journey based on standardised processes, which we call "Tasks To Be Done" (tool:



Figure 8: Helpful evaluations based on a series of customer journeys.

"Task To be Done"). Our pragmatic tool draws deliberately on the more sophisticated "Jobs To Be Done" model by Anthony Ulwick.

Customers with individual experiences (customer journeys)



Figure 9: How customer journeys can be generalised as "Tasks To Be Done".

Essentially, it involves collecting a large number of customer journeys to identify a "need". These journeys are layered in order to identify the typical steps within the customer experience. The customers complete these steps in order to perform a "task" that is necessary for the customer experience and hence to continue the journey. Each task is relevant to satisfying the customer's own needs - whether they are emotional, objective, individual or collective. Where the assembled journey cannot be layered neatly according to the sequence of steps/tasks, it is likely that there are relevant differences in customer needs. In general, variance in the sequence of tasks will point to an area that requires improvement.

A Consultation

Where the sequence of Tasks To be Done is resilient and aptly named, the channels used for each task are listed. Afterwards the available channels or those that the company would like to see used can be added. That produces an interesting and meaningful impression.

This tool will provide valuable insight if there are between 12 and 24 customer journeys. Conducting a review with an interdisciplinary team of experts is worthwhile at this point: Can new channels or concepts be introduced at this point to reduce, simplify or improve the number and sequence of tasks? Is there discernible performance innovation, room for automation or improved market communication and differentiation? The results of this work can revolutionise customer behaviour, fundamentally (disruptively) change the market and help a company to establish a new position.

But itemising the Tasks To Be Done is not only useful in order to improve the customer journey, it is also the basis for measuring the changes in customer behaviour and for conducting a review on whether the measures bear fruit.

Are you familiar with the tasks that your customers have to resolve? If so, where do you believe there is room for improvement? The example of "Taxi vs Uber" is a good way of illustrating the results of the Tasks To Be Done: The differences in the customer journey for these two providers are plainly visible. By using the app, the customer journey with Uber is significantly shorter: Customers are no longer required to search for and contact a taxi company and also do not need to state where they want to be picked up. The app shows them where the vehicle

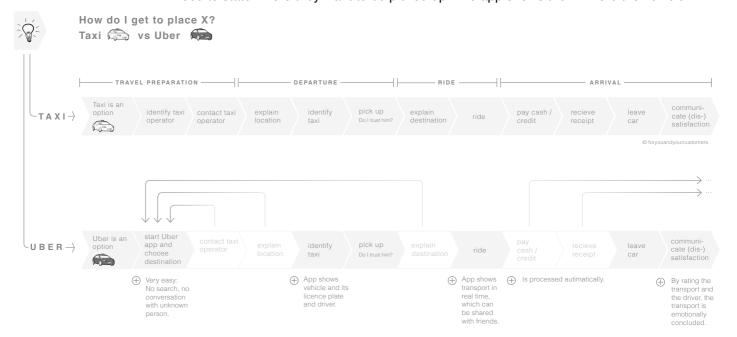


Figure 10: The customer experience "As Tasks To Be Done", based on a comparison between a taxi company and Uber.

is currently located and how long it will take until it arrives. The process of identifying the taxi – or vice versa the customer – is also simplified, as is stating the destination. After all, the driver already knows where the customer wants to be taken. Paying for the ride and requesting the receipt are also redundant as explicit work steps, as they are managed automatically.

Customers enjoy many benefits if one compares the use of Uber with the journey they experience when taking a taxi: Simplification and shortening of the journey; additional functions and benefits such as automated, detailed information; as well as easy rating of the driver at the end of the customer journey.

The customer perspective helps companies to build a better understanding of their customers, potential customers and non-customers. This understanding can be used to continuously and disruptively develop the offering as an integral customer experience that meets all of the individual needs.

Which aspects are you missing in the customer perspective? We look forward to hearing from you.

The Market Perspective

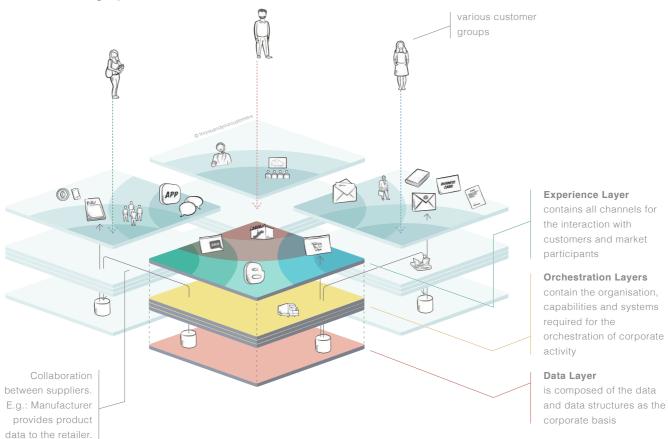
The market perspective of the Exploded View lets users consider how the market and the customer behaviour interact. This overview simplifies the process of planning and resolving the company's options concerning their customers and business partners. Therefore, this area of the Exploded View is frequently described as the "strategic perspective".

How do you develop and visualise your market strategy?

The Exploded View allows to visualise these contexts: The uppermost layer of the company, the experience layer, remains important and continues to act as the interface, the level that is experienced by customers and the market. As the foundation level, the lowest layer – the data layer – is detached from the stack so that the data and how it flows can be observed. Between experience and data, the three layers of organisation, performance and assets are grouped and combined as the "orchestration layers", as they orchestrate how the company does business. The customers are shown floating above the company's layers. Unlike in the customer perspective, they no longer represent a specific person. Instead, each of them symbolises a customer group that experiences the market.

Figure 11: The market perspective shows several companies and various customer groups.

The market perspective can be used to observe and analyse the interaction *within* and *between* the companies for the various customer groups.



The Company on the Market

Companies and customers have new opportunities due to advancements in technology. These advancements produce benefits, become wider known and cause expectations on the market. Customers want more than just to look at and buy products in shops. They want to shop at home, sitting on the couch with their iPad. This has added Internet functionalities to the analogue channels usually encountered in the retail sector. In order to integrate these new channels, companies need to develop new capabilities and skills that were previously not required in that form. The middle example in the following diagram shows the principle in a radically simplified form: An online shop is nee-

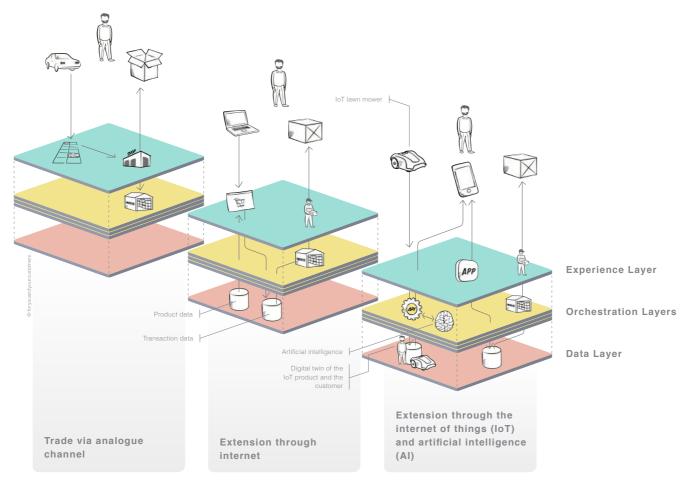
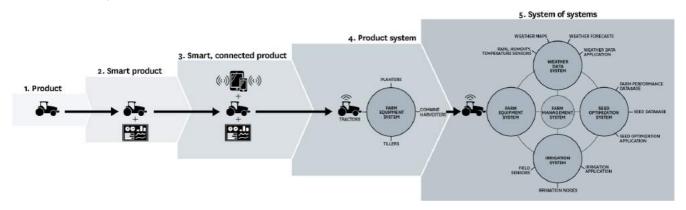


Figure 12: Development of trade and the customer experience.

ded. It is maintained by employees who are skilled in e-commerce. Product data is needed. Orders must be kept as transaction data, triggering the processes from warehouse removal to delivery to the customer.

"Smart Connected Products" as triggers for closer relationships with customers.

Figure 13: From the Product to the Ecosystem, by Michael E. Porter, Harvard Business Review. 2014. But the market is not immobile. The next wave of innovation sweeps over customers and companies even before the most recent advancements have "settled". The current innovations are features added through the Internet of Things (IoT) and their "digital twins", and blockchain and artificial intelligence (AI) with machine learning. These advancements in technology offer companies new opportunities to interact with customers thanks to "smart connected products". These connect to the Internet and create added benefits through automatic updates or integrated services. For instance, a lawn mower can inform its owner that the blade needs to be replaced. It also can offer to order the blade and, if necessary, arrange an appointment with the service technician to mount it. Alternatively, the lawn mower detects damage in the lawn and triggers watering or fertilisation – perhaps with any necessary services as well.



Barely any company is able to provide these customer experiences and services (known as "Systems of Systems") on their own. Close collaboration with other companies and supporting platforms have become relevant to a company's success.

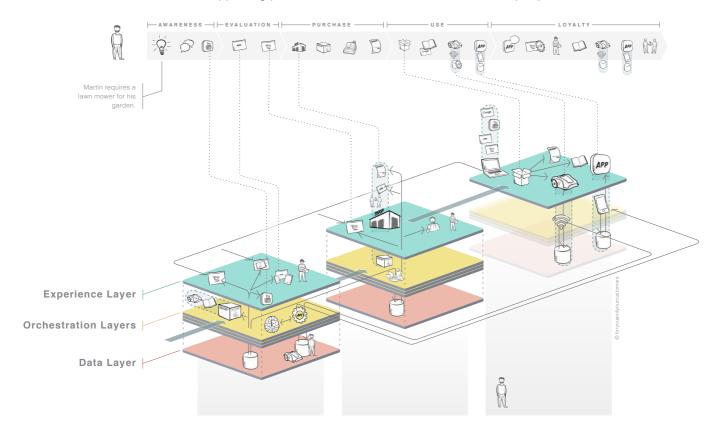
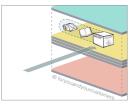


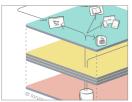
Figure 14: A customer's journey and his interaction with the company to produce this customer

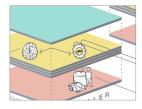
Several Companies on the Market

Things get a little more complicated as soon as the customer experience depends on other market players, for example if various dealers offer the same product. The market perspective for a manufacturer of lawn mower robots with IoT functions might look like this:

Figures 15a/b/c: Developing the supply chain into a digital supply chain.







This diagram provides a vivid impression of the relevant goods and data streams within the company and between the market players. The flow of money is not included in this case. The lawn mower manufacturer is shown on the left. Now it is not only using dealers (companies in the middle) to sell its products, it is doing so directly – for instance via its own website – as we see on the experience layer.

How could the collaboration between the companies be depicted? The diagram visualises the three forms of collaboration:

- The *Supply Chain* (15a) shows the flow of goods from the manufacturer to the dealer, and from the dealer to the customer. This flow of goods takes place in a physical form. The product may change its condition from station to station, for instance if a price is added or advice is provided at the point-of-sale.
- In this model, the *Digital Supply Chain* (15b) consists of three components: The first is the publication of information by the company (e.g. product information) on the channels of its experience layer. Second, the company uses the orchestration layers to provide its dealers with information, which they in turn process and apply. Third, the customer uses the channels on the experience layer to obtain information or to purchase goods and services. This completes the digital supply chain from the customer's perspective.
- Acting in real time, the *Smart Connection* (15c) establishes a connection between the products and applications chosen by the customer and the company. The customer

How adept is your company at managing the supply chain, the digital supply chain and smart connection?

experiences a seamless integration of performances that are tailored to his specific needs and situation. This requires tools like apps on smartphones or IoT devices that are connected with the Internet.

The supply chain, the digital supply chain and the smart connection are related and possess both interesting similarities as well as fundamental differences. Many companies are extremely skilled in managing the supply chain, but still carelessly neglect the digital supply chain and haven't even begun a serious consideration of smart connections.

A lot is required of companies if they want to manage the digital supply chain efficiently. But they do not have a choice and will not be able to avoid a closer appraisal of its opportunities.

The requirements for companies that wish to implement smart connections and create ecosystems for their customers are even higher. For instance, it is necessary to create and manage a digital twin. It should be permanently available, consistently up to date and identical to its real-life equivalent. The equivalent can be a lawn mower, an oven, a car or anything else.

Do you make creative use of the requirements defined by the legislator and the market to advance your cause and secure a competitive edge?

But the most original digital twin is the customer's dataset. A digital twin of the customer has already been created, as soon as he logs on to the company website, for instance to subscribe to its newsletter. To what extent are companies able to maintain all data relating to the customer as a digital twin entity and to keep it up to date at all times? These are the standards required for a meaningful customer relationship, one in which both the customer and the company will flourish.

In essence, the new European General Data Protection Regulation (GDPR, May 2018) defines the terms for managing the customer's digital twin. Nevertheless, very few companies are using these provisions effectively – to the benefit of customers – by establishing methods to create digital twins or smart connections. Not only are the latter able to foster closer customer relationships and loyalty, they can also be used to build a proprietary ecosystem. This would force partner companies to reconsider their role in the collaboration – being a valuable part of the ecosystem or missing out.

Markets are conversations. (Cluetrain Manifesto)

Market Positioning

Companies can strategise and plan their own positions on the market. Ultimately, though, the customer's overall practical experience across all channels and market players, including his experience with the real and the digital product, will be the factor that truly counts.

The overall experience and hence the perceived positioning can be modelled as the sum of all "lines" between a company, the other market players and the customers. The interaction and resulting customer loyalty rises proportionately with the number of lines that connect a company with its customers (whether dealers or consumers) on various levels. This is why all lines must be considered in efforts to improve the market position.

An organisation can use this perspective of the market and the other market players to model current and new business ideas and sales concepts, as well as to outline, check and optimise customer relationships.

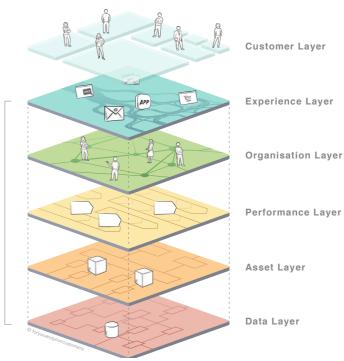
Which aspects are you missing in the market perspective? We look forward to hearing from you.

The Company Perspective

The company perspective in the Exploded View provides a detailed consideration of the organisation and enables its operational improvement. The relevant aspects and

Figure 17: The Exploded View in the company perspective; generic diagram.

the areas in which change is necessary within the company can be named and the responsibilities defined and addressed. This perspective is extremely valuable for many of the stakeholders and permits the emergence of more efficient collaboration. It visualises all six layers of the model and is hence the basis upon which to build a better understanding of the other perspectives. Among other reasons, this is why it is the most frequently used perspective within the Exploded View.



The Six Layers

These six layers are able to model each company in detail and with surprising ease. Many relevant contexts for the company's development can be presented and explained.

The process of considering the company as an integral unit begins with the customer and moves "downward", layer by layer, to the data. The model is based on the concept defined by Artur Koestler and the "holon" that was described in detail by Ken Wilber. Each element is a part and a whole in equal measure, and the sum of all elements represents a layer.

Customer Layer

The customer layer signifies all of a company's target groups, such as customers, potential customers, investors, potential employees or others. Therefore, this layer includes people (B2C) and/or companies with the persons acting within them (B2B).

The customer layer is used to obtain a clear overview of all target groups. It allows to understand the expectations that prevail within each of target group, which performances would be beneficial and how their needs can be satisfied.

Among others, the important tools in this layer include:

- Customer segmentation that is used to divide and model target groups in several dimensions.
- The customer lifecycle for each target group, for instance according to the organisational lifecycle model.
- The list of needs according to target group and relevance, including the associated Tasks To Be Done.
- The market overview (i.e. the supply chain in B2B) from which the customers can obtain the necessary performances.

A large number of questions are derived – and possibly answered – on the customer layer. For example: How is a customer recruited? How is a customer lost? How does the customer behave?

The customer perspective is applied to acquire a better understanding of the actors. It helps the company to analyse individual behaviour as a model for an entire customer group and from this to extract suitable insights. This way allows to understand how customer segments act on the market to ultimately derive strategic initiatives and modifications that are relevant to the market.

But a company perspective with the following, underlying layers is needed in order to implement the insight acquired from the previous perspectives.

Experience Layer

The experience layer comprises entirely of user and customer experiences. It includes all of the company's channels – also those that it does not own and therefore is unable to influence directly.

The purpose of the experience layer is to orchestrate successful and exciting customer experiences. The existing channels need to be coordinated and developed steadily, while new channels should be tested and integrated.

Among others, the important tools in this layer include:

- The channel inventory (a.k.a. the ChannelMAP), in which an overview of channels is modelled according to a variety of categories.
- The individual channel profiles that provide information on the task, functions and responsibility etc.
- The design manual and the content strategy that define the policies to build the channels and to add their content.

Many companies are unable to connect their current channels to provide a successful and consistent customer experience, let alone to meaningfully check and possibly integrate the many new channels that are emerging.

The experience layer should be able to answer the following questions: What is the task of each individual channel for the company and for which target groups? Who in the company is responsible for which channel? Which services, systems and data does each channel use? Which contents ought to be communicated on the individual channels? In what ways should which channel be improved in the coming six months?

Organisation Layer

The organisation layer includes all people working in a company. The organisational form and the working culture are therefore the elements that provide a structure to this layer.

The organisation layer is intended to visualise how a company can address the challenges it faces and grow in the process: How are agreements made and enforced? How does the company ensure that customers and employees receive strong support? How are important projects implemented successfully? How does the company make certain that the right people are working on the right issues?

Among others, the important tools in this layer include:

- The employee overview that presents the people and their roles and responsibilities.
- The company's civilisation, i.e. its organisational form, roles, policies, communication and planning etc.
- The overview of workflows and projects (e.g. in regard to the experience layer).

Are you familiar with your channels and how they impact customers?

What kind of employees are we attracting? Why are we losing certain types of employee? Identifying the factors that create particularly successful companies is increasingly the subject of intense analysis and debate. Traditional organisation forms are challenged, while new working models are praised as visionary. Not to forget, demands stated by employees have grown in recent years as well: Like customers who are staking their claim to particular experiences, employees have also evolved and expect new things from their work and their working environments. So if the employer is unable to offer them a meaningful working experience (in other words: A task and the sum of all employee journeys), the most talented people will simply gravitate elsewhere.

With which employees do you want to tackle digitalisation in your company, and with which ones would you prefer not to? In addition, requirements placed in employees have also grown: Collaboration is more demanding, as a variety of skills and competencies are increasingly needed to resolve current tasks. Teams need to adapt faster due to the shorter cycles (e.g. the market requirements). Dedicated employees face up to these requirements and are eager to learn new things. Less committed colleagues remain a different challenge altogether for companies.

Companies that actively embrace change are particularly reliant on seasoned managers. Leading an organisation through multi layered challenges takes skill and is certainly more difficult than it used to be. Managers need abilities to compensate their lack of control. These factors include a new perspective of individuality, different values, a more profound understanding of systems, as well as new forms of collaboration and communication. Working in decentralised teams with flat hierarchies – perhaps even as self-organising cells – is likely to become vital or at least can secure a competitive edge in many sectors.

Performance Layer

The performance layer comprises all performances offered by a company. They include services, products and the knowledge or abilities that the organisation deploys to respond adequately to the needs of the market. For instance, a dealer has the ability to obtain the required product at a particularly attractive price. A manufacturer, in turn, can adapt its product to reflect the needs of the customer. A mail order company knows the location of each individual product and is able to deliver the customer's order cost-efficiently and quickly. A bank is able to offer its customers a particularly sustainable investment.

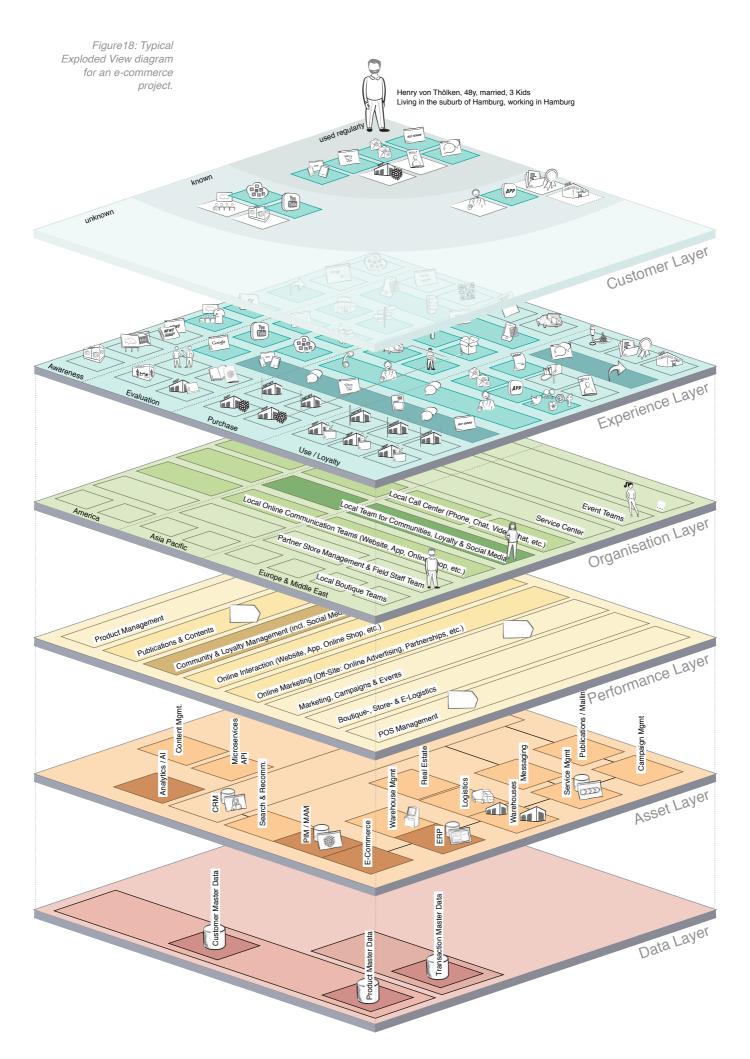
An overview of the company's performance capabilities can be produced on the performance layer. Here, it is important to model more than just the current core competencies, and instead to visualise the entire portfolio, most typically with additional information about marketing, IT and HR etc.

Among others, important tools in this layer include:

- The performance overview, modelled according to various categories.
- The profile of each performance, providing information about auxiliaries, responsibilities (RACI), input/output and KPIs etc.

A variety of business units on the organisation layer can use these performances, or they can be automatically assigned to customer channels, provided they are structured cleverly. This helps an efficient company to evolve.

How broad is the performance spectrum within your company, and which core competencies do you want to build or expand?



Asset Layer

The asset layer consists of all resources within a company, whether they are information systems, property (e.g. retail shops at a good location), warehouse facilities, logistics, production, IP/know-how, infrastructure, capital, etc.

The asset layer should be used to create an overview of the company's key assets. Current and planned IT systems play a crucial role, especially within the context of digitalisation.

Considering our focus is on digitalisation, important tools in this layer include:

- The system and service architecture, in which the systems and their role within the network are listed.
- The system roadmap showing the rough and detailed planning, as derived from the system strategy.
- The guidelines for system development and operation.

The provision of performances, collaboration with the company or the creation of shopping experiences for customers are virtually impossible today without systems. And the way they interact is particularly vital, as fresh requirements are defined and new systems needed continuously.

Forward-looking decisions which influence the company's potential are made based on the system architecture and system roadmap. It is hardly surprising that people in charge – the CTO or the CIO – are senior executives in the company and are frequently members of the top-level operational management committees.

System providers like SAP, Oracle, Salesforce and others have also become increasingly important. They are steadily widening their product portfolios to obtain the biggest slice of "cake" they can get within companies' system architectures, assuring their system relevance and allowing them to demand high licensing fees. Usually this is not a problem, as long as the company has the technical skills and therefore the freedom to design its own system landscape.

But a consideration of the system architecture involves more than just the software vendor and its products, but also the actually implemented and running systems. They are specific to each company and often bear little resemblance to the original software.

Fast availability, as well as high flexibility and scalability of reliable and secure systems have increasingly become critical factors for many companies. Software providers have identified this fact as a competitive advantage and are therefore offering service-oriented systems (for instance "micro-services") and cloud solutions.

But the crucial factors for those in charge in the companies are still the meticulously planned system architectures, the interaction between them – including the cloud components – and the idea on which they are based. Put differently: Successful companies harness the benefits of digitalisation and are able to grow their asset layers systematically.

Data Layer

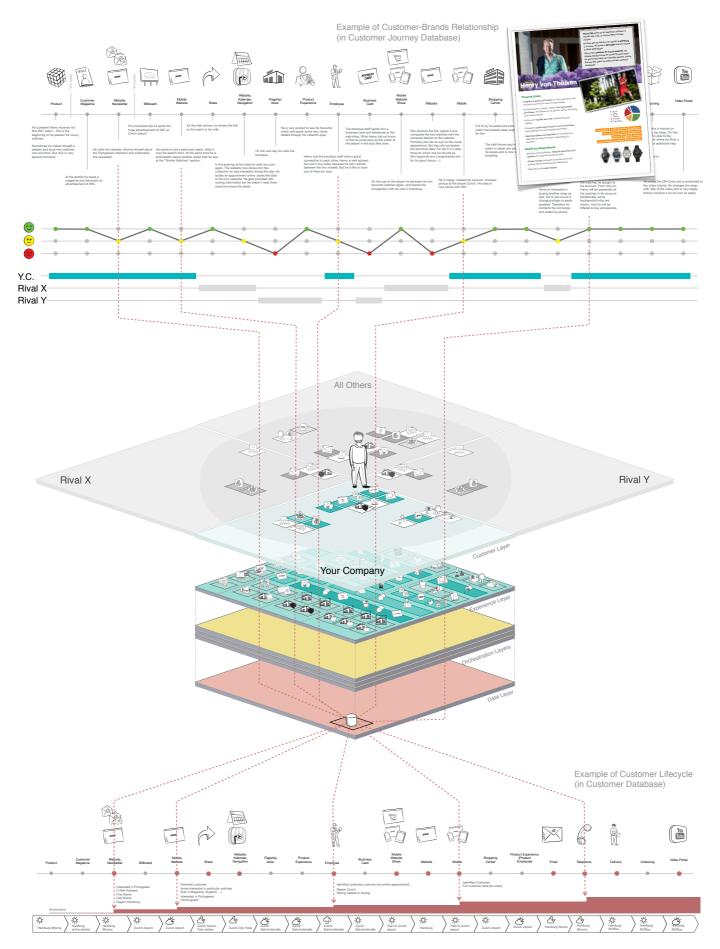
The data layer contains the sum of all data. This needs to be understood in an integral sense: Customer data, product data, transaction data, campaign data, service data, procurement data, customer movement data and market data, as well as data generated in daily tasks and collaboration, including appointments with customers, emails and complaints etc.

The data layer provides an overview of all available and potentially available data, as well as its value and benefits for the company. Perceived in this way, the business should make use of the data: in its systems, performances, its work with employees, on its channels and for the customers.

How well have you invested in your system landscape in the past? Is your current roadmap well-considered and would investments be worthwhile?

Which systems in your company should be cloudbased and which ones shouldn't?

Figure 19: The Exploded View with a customer journey and the analysis of which data can be collected.



Among others, the important tools in this layer include:

- The information model that provides a semantic replica and description of all entities within the company.

- The data index as an overview, detailing which data sources and data are available in the company and in which form.
- The data models of business-critical entities (customer data, product data, transaction data etc.).

Data is often described as "tomorrow's oil". But it is more than that, as data is available in virtually unlimited quantities that are growing by the day, also in companies.

For many firms, data will be a vital building block in shaping their future success. Digitalisation of their operations would not be possible without data. Smart data management, i.e. the ability to create value with an extremely large amount of data, is growing in importance.

In order to be used, data needs to be understood, which means processing it into information. For this to happen, it is necessary to assess and join the data. It needs to be placed in a meaningful context. The first tool in this regard is the so-called information model. It creates an enterprise-wide understanding and provides a sustainable structure for concepts and systems that allow the desired benefit to emerge. The information model lends structure to the actual data models, assuming the same role as the system architecture for the systems or the organisation model for the organisation.

Where the volumes of data are particularly large, big data analyses or even artificial intelligence (AI) and machine learning can yield valuable insights, which in turn will be used to develop new performances, for instance by identifying an attractive customer group that a company can then address in a purposeful way.

Managing data requires a sophisticated system. If it is not available, the company will have a – quite literally – profound problem. After all, each system generates or uses data. Their interaction without a "single source of truth" will only produce problems on the higher layers, which will be visible to employees and customers as inconsistencies, quality defects, inefficiency, sluggishness and lethargy.

Which areas of your company cooperate with your data specialist? How well do they work together?

How capable is your

needed?

company at collecting and

processing data and then making it available as

Typical Patterns

Using a model to reduce reality reveals previously concealed contexts in the form of typical patterns that then can be understood. The Exploded View explains these contexts to allow leaders and teams to make better and faster decisions, even in the complex inner workings of day-to-day company life. Typical patterns of the Exploded View include:

Successful projects consciously consider all six layers

Experience has shown that relevant projects intersect with all six levels. Just consider the introduction of a new e-commerce system and its implications for the entire enterprise. The key question is therefore: Are the stakeholders explicitly aware of the aspects contained in all six layers? Is this more of a random process or does it grow over time?

Projects that *consciously* include *all* layers are usually the more successful ones. Including the various aspects from each layer may be a demanding task, but it is certainly rewarding. It has become apparent: Merely considering and including a single layer of a company will only yield insignificant benefits. And however sensible it may seem for the organisation to proceed in that way at the time, the project will be relevant to further develop the organisation. Or put differently: The project will not be "strategic".

Do you need quick-wins, or can you focus on lasting benefits? Critical projects should be placed in the hands of interdisciplinary teams including people from all six layers: The person responsible for customers, the expert for experience, representatives of the organisation, people with knowledge of the performance portfolio, system architects and data specialists. Long-term success will become more likely if the team possesses significant competency in the individual layers.

Naturally there are projects – above all phases – in which a certain layer will be addressed in particular, which then shifts the focus of the project.

Companies are well advised to define clearly how the six layers must be addressed over the course of a project. The templates for project applications, project planning, team planning, status reports and project documentation ought to include suitable elements.

Experience has shown that companies using all layers as models to structure their undertakings have more successful and effective projects. After all, they will not neglect any of the key aspects during implementation and can ensure that interaction proceeds smoothly.

Requirements from the top down – Implementation from the bottom up

The stakeholders should collect requirements starting with the uppermost layer and then move down; in contrast, implementation begins at the lowest layer and moves on to the higher ones step by step.

The understanding of customers obtained on the customer layer can be used to develop requirements for the channels on the experience layer and the others below. In turn. the insight about the channels on the experience layer provides indications for requirements that are placed in the organisation and lower layers (and so on).

By contrast, it is advisable to start on the data layer by implementing the information model - the data, and above all the data structures, are the foundation on which every project is built. Implementation of the systems on the asset layer follows directly afterward. As soon as the systems are ready, the services can be established on the performance layer and then permeated upward on each of the other layers. Proceeding in this way ensures that implementation on all layers reaches the customer and ultimately creates the desired benefits.

Unfortunately, though, many companies do not adhere to this order. Among other things, they may introduce systems without being aware of what the employees or customers need. Conversely, they also create channels without checking the integrity of the data and the connection to the data sources.

Companies that work through the requirements analysis and project implementation across all layers and in the correct order produce significantly fewer mistakes and achieve their envisaged benefits faster.

The deeper you go, more control and influence you have

A company's ability to influence reduces steadily from bottom to top. There is practically full control at all on the lowest layer - or at least there should be. Companies will find it more difficult on the systems layer (asset layer), as they will be increasingly dependent on system vendors and other influential factors. The ability to control things is even lower on the performance layer. Influence subsides yet again on the organisation level and drops once more on the experience layer when the companies notice that the market is demanding standards that have not been included in the equation and the customers start to shape what is happening on the channels, for instance through their social media activities. The customers and the market are entirely uncontrollable.

On which layer are the requirements for your projects frequently "forgotten"? What does your company truly control?

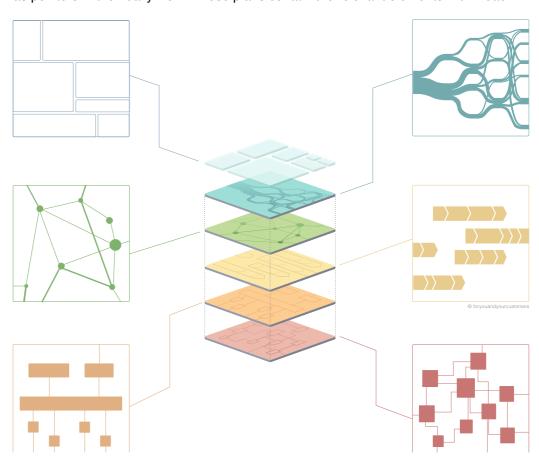
A company's ability to control a layer will determine in part the extent to which it can directly influence the higher layers in its own interests. But if it fails even to manage its own data, the lowest layer, this loss of control will radiate upward into the higher layers and will inevitably lead to significant problems that will automatically intensify the higher up they go.

So companies need to ensure first of all that they have their own data under control. Their data is the bedrock for the majority of projects. It enables the company to take action on all other layers. Controlling a layer begins by creating unequivocal descriptions for each of the elements, and by ensuring that they can be used on the higher layers – thus allowing order and efficiency to emerge.

Clear floor plans for each layer create order and orientation

Employees should be able to find their way around each layer. This is why companies need to clear floor plans that are available to all stakeholders and which they can use as pointers in their daily work. These plans contain the relevant elements within each

Figure 20: Each layer has its own characteristics, as shown clearly in the floor plans.



What are your "floor plans", i.e. the plans that are relevant to your digitalisation process? layer. The elements are clearly defined, as are their roles and boundaries with other elements. What's more, a good plan shows the reference points between the elements and the layers located above and below.

Employees will be able to collaborate more sustainably and efficiently if these floor plans are made available to them as integral parts of their working lives. Companies are therefore well advised to post these floor plans on the intranet, train employees in their use and update them regularly as well.

Shared use on the immediately higher layer

Shared use of the elements on the immediately higher level nurtures sustainable efficiency, increases consistency and reduces the error quota, as: Several systems will use the same data, various services will utilise the same systems, and different teams will draw on the same services etc.

Errors as indicators of underlying conflicts

Which things should be reused more often in your company?

Conflicts between elements on one layer lead to problems on the higher layers. They become noticeable further up and continue to propagate upward. Two conflicting datasets will cause problems for systems. A conflict between two systems will impair a service, i.e. the performance of this service. A problem between two teams prevents interaction between channels, and so on. Conflicts are frequently caused by inadequate delimitation, which can be resolved by introducing a clear floor plan.

Many problems experienced by companies are rooted in the data layer. Here, the information model is the main floor plan for data. Provided the information model is prepared carefully and implemented correctly, the systems will usually run for years error-free and the conflicts in the performance of services and organisation will drop demonstrably.

Companies are therefore advised to provide all employees with the improvements management system (tool: "Q-Reporting System") so that they can report any conflicts immediately. These error reports can then be analysed based on the individual layers and will hence contribute to a process of continuous improvement.

Relevant processes affect each layer

Processes are not restricted to just one layer. Instead they take place on each layer and also between the layers. Like in the implementation of projects: Relevant processes affect each layer. Good connections between the layers make them stable. Inadequate connections will produce downtime and the error quota will rise.

Processes have typical properties on any given layer. The impulse is provided by the next higher layer; in contrast, the sequence is shaped by the layer below and delivers a result back to the layer above.

Companies should design relevant processes across all layers. But the easiest procedure is to structure the three lowest ones clearly around processes, so that the employees can access and use the company's performance (performance layer) whenever it is needed.

Where are the breakpoints in your company processes and where are they located in the Exploded View?

Outsourcing is possible on every layer

It is reasonable to ask on each layer which elements should remain in the company and which ones should be relocated elsewhere, i.e. outsourced to another company. In principle, every element on any layer can be transferred to a different business. On the organisation layer, this would mean outsourcing employees to another company. Services would be transferred to a partner company on the performance layer, ensuring that they would remain at the disposal of the company, but perhaps at a lower price. Cloud solutions allow the outsourcing of systems on the asset layer, including their data on the data layer.

A frequent knock-on effect of outsourcing is that the matching elements on a lower level are also moved to the supplier. They may become cheaper if they are sourced elsewhere, as they would be available for use on multiple occasions by different companies (refer to Shared Use).

In the event that the elements below should remain owned or directly influenced by the company (refer to Influence), it would be inadvisable to agree a supplier relationship, or any such arrangement would at least need to be stipulated or monitored separately in contracts, audits and by other means. Example: Using Amazon to manage sales (channel "Online Shop" on the experience layer) might be cheaper, as well as more efficient and successful. In this case, though, key parts of the organisation, its abilities, systems and data will also be relocated outside the company, namely to Amazon. This

What is typically outsourced in your company and why?

may place the company's development at risk, especially if it views e-commerce as a potential core competency.

Therefore, when approaching issues of "insourcing/outsourcing", companies should refer to the layers of the Exploded View in order to make better decisions for their short, medium and long-term planning.

Systematic modelling of enterprise-wide collaboration

The enterprise-wide collaboration commonly encountered among international and multi-brand companies is equally easy to model using the Exploded View. The procedure is essentially the same as with outsourcing. This model is useful to clarify and communicate a meaningful division of labour and tasks, especially when facing more demanding situations.

Companies with complex structures should define the various forms of collaboration within the group, and then model them using the Exploded View. It can then be used as a basis for discussion, agreement and communication.

The lifecycle of each element on one layer

Every element on each layer has a lifecycle and lifetime. For customers, this would be the "Customer Lifecycle". Systems have a system lifecycle, etc. Being aware of the typical lifecycles of the elements helps with planning. It also is a basic requirement for assessing the maturity of each layer.

Companies seeking to actively grow their business should know and monitor the lifecycle of key elements of the layers. This allows for a meaningful deployment resources and reduces dependencies.

Which elements require closer lifecycle monitoring in your company?

The maturity of layers within a company is similar

An immature layer will prevent the growth of all others within a company. Where maturity is low on the data layer, the systems located on the asset layer are unlikely to have developed much further. This means that immaturity prevents meaningful development of the company. In some cases it would even be pointless to invest in other layers.

Therefore, companies need to be aware of – and regularly check – the maturity of their layers. The layer with the lowest maturity should be monitored and nurtured in particular.

Increasing Diversity

Diversity has been rising steadily across all layers for years. This means that the requirements placed in companies have also grown. Managing diversity takes breadth, which ties up resources. Companies that fail to control their increasing diversity will remain stuck on the same performance level, unable to fulfil the additional demands. In the best case scenario it would be a "focused" company, while in the worst it would cease to exist. Rising diversity is perhaps the greatest challenge that medium-sized to large companies in particular will have to address.

What is currently the weakest layer in your company and why?

This rise can be modelled accurately for managers and employees using the company perspective in the Exploded View. These groups will need to overcome diversity or position their companies as niche providers.

Let's look at the rise in diversity layer for layer:

- Customer Layer: Customers are becoming increasingly heterogeneous. They are more competent and able to distinguish what they want and what they will leave aside. Europeans are now able to pick between frequenting an Indian, Thai or Japanese restaurant. That wasn't true ten years ago. This diversity means that a city will have a range of different restaurants, although the population has not risen significantly. A

How and in what way has the diversity of your customers developed over the last 10 years?

- company that focuses on just one target group will often have to increase the radius in which it does so in order to serve the same number of customers and to generate the same revenue. Increasing the radius is often accompanied by using a larger number of channels.
- Experience Layer: Channels are becoming increasingly heterogeneous. Advancements in technology mean that companies can choose between an ever-expanding range of options to integrate their customers. Connected to the Internet, computers and smartphones have led to a steep rise in the number of channels and people are using these opportunities to select and shop for products. A company that does not invest in channels that are being used increasingly by customers will almost inevitably lose revenue to the competition in the medium term.

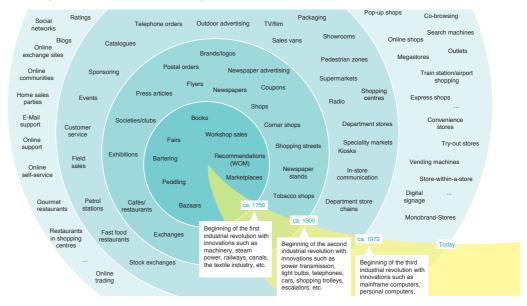


Figure 21: Increasing diversity based on the example of channels, J. Moeller, Multichannel Guidelines, 2014.

- Organisation Layer: The diversity of employees and the sheer range of their requirements have also risen like among customers. One employee wants to work in a highly competitive environment, while the other would like prolonged paternity leave and yet another expects the supervisor to support his personal development. Traditional, more hierarchical forms of organisation have a hard time coping with this increasing diversity. The number of potential employees is likely to shrink if this organisational form is retained. This is why many companies are currently discovering, experimenting with, and testing a raft of alternative organisation forms.
- Performance Layer: Companies increasingly require varied competencies in order to provide the necessary services. So the diversity of required skills is also rising. Three decades ago, it was sufficient if manufacturers concentrated on making good products. But that's no longer enough to survive on the market, and the contribution by production to value added has dipped sharply. Companies were forced to invest in new skills and to acquire new services: Research & development, product design, sales, marketing, supply chain, IT and digitalisation etc. Many of these skills only emerged in recent years. Where a company's performance fails to move with the times, it will run the risk of becoming reliant on other enterprises that are able to perform in the necessary way. Although this is not always bad, it leads to closer links and dependency. Nevertheless, the company is called upon to include specialisation within its own processes.
- Asset Layer: The variety of systems that are required in companies has risen sharply.
 Accepting the necessity of an ERP system took hold many years ago. But now the list of IT systems is long: CRM, PIM, website (CMS), campaign management, email

marketing system, social media management, data warehouse, analysis software etc.

- Data Layer: It is no surprise that the volume and diversity of data are increasing. However, many executives underestimate the sheer quantity and variety of data that companies have amassed in recent years. New legislation, like the introduction of the GDPR in May 2018, make management an even more complex affair. The journey has just begun, and only now we are learning how to approach this issue.

For many companies, especially young ones, the increasing diversity on all levels offers entirely new opportunities to set themselves apart and position their business whether by using new channels, by introducing a new organisational form to recruit of talented employees, by finding smart ways to deploy data and systems, etc. It is easier for them than it is for large companies where change in the six layers is difficult.

Increasing diversity is a significant challenge for established companies: Can the new elements be integrated with the current ones on each layer? Should the new elements really replace the old ones? How will the long-serving employees, who have been with the company for decades, respond to their new colleagues which believe in different values and methods? How can the new systems be combined with the current ones, or might it be better to just replace some of the old structures?

The rising diversity is test for many companies, one which will determine whether they are able to assert their positions on the market and integrate variety on every layer. Naturally, companies are welcome to remain organised precisely the way they are and reject any change. But senior management ought to be aware that the company will surrender their potential to competitors that are able to exploit such diversity.

The capacity to harness diversity in one's own interests is an important indicator of an organisation's maturity: Each company has a degree of maturity on each layer, and an efficient one will be similarly mature in each area. After all, it will only be able to perform as efficiently as the layer with the lowest degree of maturity. This is because the weakest layer limits the potential of all others, just like the proverbial weakest link that defines the strength of the entire chain.

So it is essential that executives are familiar with the maturity of each layer - and therefore with the company's ability to manage diversity. The best way to assess maturity is to conduct an audit. Its findings can be used by management to initiate measures and to monitor progress in regular reviews or repeat audits (tool: "Digitalisation Audit /

Identifying the Status Quo on all Layers"). Unfortunately, most executives have been unable to develop a clear impression of their

companies' level of digitalisation. But most of them grasp intuitively that progress is needed across all layers of their companies, and therefore are willing to perform a maturity audit. So far, though, they have been lacking a meaningful model. A model to introduce a shared, comprehensible language or nomenclature. A model for collaborative work by various teams to grow the company. A model that offers a clear view of their companies.

The company perspective within Exploded View can become this missing model for many executives. To audit maturity, to establish a common language and nomenclature, for collaborative work and to overcome the many different challenges of an increasingly digital world and its rising diversity.

How is progress visualised for management and employees in your company?

Which aspects are you missing in the company perspective? We look forward to hearing from vou.

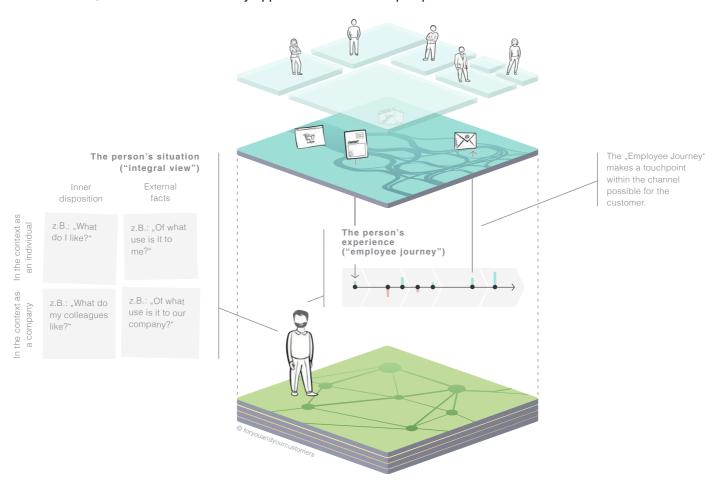
The Employee Perspective

The employee perspective in the Exploded View considers the people working in the company, their situations, routines and experiences (Employee Journey). The ability to take the perspective of the employee and to achieve steady improvements in their employee journey is certain to make a significant contribution to the company's success.

Learning as an Organisation

Figure 22: The employee perspective opens the organisation layer in the Exploded View.

Many aspects of the employee perspective are similar to those of the customer perspective. Therefore, when viewing the situation of the employee, his motivation (task) and the resulting employee journey can be understood using slightly modified tools that were already applied in the customer perspective.



Similar to customers, every employee is different. Companies that accept these differences and integrate them purposefully in the assignment of tasks are likely to be more efficient. Developing an understanding of employees and using it to extract suitable individualised actions will make an organisation significantly more effective.

The employee situation can be modelled succinctly using an integral approach. It involves analysing the employee using four quadrants with the inner attitude and external facts on the one axis, and the individual ("me") and the collective ("us") – usually the team, superiors and peers – on the other. That analysis allows a more prescient understanding of what the employee Wants to do (top left), May do (bottom left), Can do (top right) and Must do (bottom right).

Pick an example to test the integral view. What do you notice?

But employees are there to complete tasks: A person's inner attitude is of secondary importance here, and the main focus is placed on external facts, so on the Can and the Must. The inner attitude will nevertheless play a fundamental role and ought to be considered in the procedures and tasks. To model this, the work and its associated tasks

can also be transferred to four integral quadrants, namely Emotional Jobs (top left), Social Jobs (bottom left), Functional Jobs (top right) and Compliance Jobs (bottom right).

The employee is motivated by an impulse to complete his work. This impulse can come from the person himself (entrepreneurial task), from the organisation (operational task) or from outside, for instance from a customer or a business partner (order or request). This impulse triggers a series of work steps or tasks, which taken together represent the employee journey.

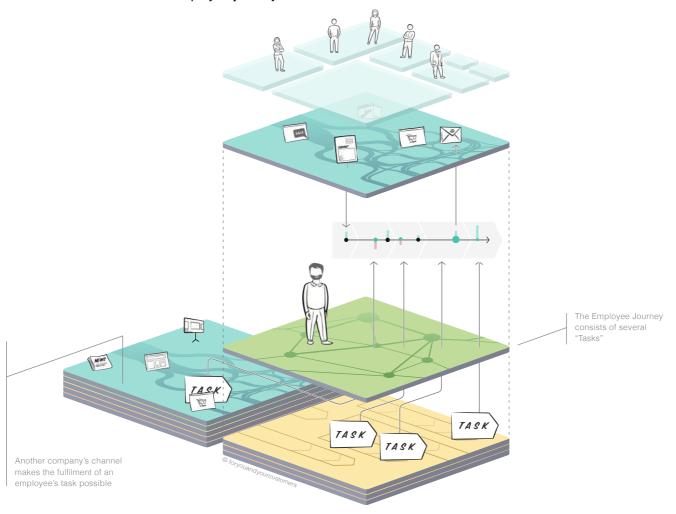


Figure 23: The employee journey uses internal services from the performance layer and external services obtained from channels in the supplier's experience layer.

Companies are well advised to collect and list work or orders that recur regularly. The employee journeys that emerge from the orders should be documented and analysed with the various members of staff. The work steps (Tasks To Be Done) can then be derived when these journey are placed one on top of the other. Once these Tasks To Be Done are defined, it is then possible to identify and allocate the systems and equipment (from the asset layer). During this analysis process, the stakeholders quickly produce an extensive list of possible improvements that should be reviewed, prioritised and documented. It may even be possible to decide on and initiate some initial improvement actions.

These tasks ultimately produce a process map (tool: "Process Map"), an index of tasks and fulfilment requests, with the associated Tasks To Be Done (tasks) and their systems and equipment. That index is valuable, it is an important overview of the performance layer (known as the "management system" in many companies) (tool: "Integral Management System").

Careful elaboration of these process maps, i.e. the management system, is likely to become the *cornerstone* in ensuring a positive performance by an organisation and a

company. When these processes are acquired from a holistic appreciation of the employee, then both "external facts" and the "inner attitude" – as individuals and as part of the collective – can make a positive impression on the company and its customers.

Tools for Digitalisation

A lot of innovation is produced in the employee perspective. Better working methods are discovered, new business opportunities are identified or new tools are developed. The business is not just being digitised for customers, the working environment is as well – for instance the tools that people use for digitalisation. foryouandyourcustomers did not just develop the Exploded View model, we also created the matching toolkit. New features are added to this toolkit and new tools developed frequently, both for us and our customers. We will now open it for you and for your customers:

Which tools for digitalisation are already used regularly by your company?

No Tool/Description

1 Integral view of a person (customer, employee etc.)

The integral view of a person is based on the integral quadrants according to Ken Wilber. They are a good method to quickly understand a situation quickly (in this case a person) and to understand the causes that inform decisions, feelings, narratives, etc. The advantage of this tool is that it is more comprehensive than the others used in this field.

The four quadrants are placed over two axes. One axis represents the subjective/emotional and the objective/rational aspect, while the other describes the individual and collective aspects. This produces four quadrants with heart, head, gut instinct and object, or want, can, may and must, or emotional job, functional job, social job and compliance job etc.

2 Personas

Personas are used to formulate prototypical customers that represent a particular target group. Developing and using personas help employees to see things through the eyes of another person and to assume their perspective, for instance in the analysis of a customer journey. This is necessary as many people find it difficult to switch perspectives. A persona can simplify that process.

The value of a persona should not be overestimated. In the end, the real people will think and act differently. Personas cannot replace direct conversations with selected target persons.

3 Customer segmentation

Customer segmentation helps to understand customers and to address them more efficiently. This segmentation is used to identify individual groups of customers with similar characteristics within the totality of potential customers. Multi-dimensional, system-supported customer segmentation is an important tool when managing large numbers of customers and is a starting point to develop personalisation and marketing automation etc.

4 List of customer needs (i.e. use cases)

The list of customer needs is the starting point for customer journey analysis. The needs should be assigned to customer segments, personas, life phases etc.

5 Customer journey analysis / ChannelOPERA for Customer Journeys

We use the ChannelOPERA tool to analyse customer journeys. It is simple, effective and versatile. The structured procedure helps build awareness for a customer's behaviour, define and improve fields of action, and document insight efficiently. Thanks to its simplicity and clear structure, some companies use the tool hundreds of times each year and are therefore able to compare their findings across various areas and countries. ChannelOPERA is available online at http://fyayc.com/products.

Analysing a customer journey can become complicated when there are several protagonists. This is the case in B2B scenarios, for instance when analysing multi-level sales or when considering various employee journeys that are necessary for a successful customer journey, in addition to the customer journey itself.

6 Experience Map

The Experience Map is a content and visual summary of various customer journeys to produce a customer need. This summary is effective for internal presentations. It creates an awareness for challenges as viewed by the customer and/or the employee.

7 Tasks To Be Done

While the Experience Map focuses on content and visual presentation, the Tasks To Be Done processes the customer journey from a structural perspective. The tool is used to recognise patterns in a large number of customer journeys and therefore to enable a targeted identification of relevant business opportunities and sustainable improvements. The findings of the Tasks To Be Done produce better KPIs, as measurements can be taken at the right points along the customer journey.

Tasks To Be Done is our version and simplification of the "Jobs To Be Done" by Anthony Ulwick, who presented his method in the eponymous book.

8 Lifecycles: Customer lifecycle/Lifecycle model

Every customer passes through "major" and "minor" lifecycles: The minor lifecycle is the relationship with the provider (a.k.a. the "customer lifecycle"). The major lifecycle is the entire life of a human being and is always shown as the lifecycle model. Different needs, influences and values influence the journey, depending on the phase in the lifecycle.

9 Horror and heroic stories (journey examples)

Analysis of the customer journeys yields insights on which customer experiences were especially good or especially bad. Horror or heroic stories can be selected for training purposes and forwarded to colleagues in the company in the form of films or comics. Doing so can help to precipitate change and raise awareness.

10 Market overview/performance chain

Many companies collaborate with partner companies to improve their market penetration. The market overview shows the roles of these individual companies and how they interact.

11 ChannelOVERVIEW

The ChannelOVERVIEW provides an overview of 129 channels that providers use to communicate with customers, to sell products and to offer services. It forms the basis for the Channel CARDS and raises awareness for a large number of channels that customers like to use. ChannelOVERVIEW is available online at http://fyayc.com/products.

12 Channel analysis / ChannelCARDS

The ChannelCARDS are used to analyse a company's channel landscape. They describe 129 different channels and a number of tasks in the form of a card game. The set is suitable for team analysis or workshops to explore various aspects of the experience layer. ChannelCARDS are available online at http://fyayc.com/products.

13 ChannelSURVEY

The ChannelSURVEY is a "do you learn" online survey of the experience layer. It is a practical tool used to investigate the roles and importance of various touchpoints within the various areas and regions of the company. Evaluation helps to develop the roadmap, especially for larger and/or international companies.

14 Benchmarking

Every company uses around 80 channels. Once an analysis has been conducted to identify the most relevant ones, it is helpful to benchmark the five to ten most important channels. Here, these channels are compared with those of the competition and the benchmark. The evaluation reveals differences, focus points and areas with room for improvements, and also contains recommendations and warnings. A best practices database helps with the analysis.

15 ChannelMAP

The ChannelMAP provides an overview of the experience layer of the company and the market. A large number of categories are used to assess the channels. The analyses obtained using other tools are also included (e.g. ChannelSURVEY, benchmarking, ChannelCARDS etc.). The findings can be used to make valuable statements, refine the concept, improve organisation of the underlying layers in regard to responsibilities, process, systems and data etc., as well as to develop a well-conceived roadmap and dashboard.

16 ChannelCOCKPIT

ChannelCOCKPIT is the dashboard used to monitor the development and state of the experience layer. This enables the identification of correlations between relevant channels and to improve the planning and orchestration of activities such as campaigns.

17 Prototyping

A variety of touchpoints can be developed as prototypes and innovation simulated in order to improve the customer experience. The prototypes provide a first impression of the innovation and help to make better decisions and plans.

18 Content strategy

A content strategy defines the orchestration of content across all channels to ensure a meaningful customer experience. A good content strategy considers the various target groups and the opportunities provided by each channel.

19 Multichannel design guidelines

Design guidelines, derived from the brand manual or corporate design, are prepared for the various channels. Good design guidelines strengthen the brand in line with the opportunities inherent to each channel and therefore simplify working with the channels themselves.

20 Organisation models for digitisation

What is the best way for a company to organise itself in preparation for the digital transformation? Neither standards nor the perfect solution exist. The best way to develop the current organisation and management structures is formulated using scenarios. Experience from many companies and insight from our own work lay the foundation to accompany executives and other key employees over the course of this development.

21 Employee journey analysis / ChannelOPERA for Employee Journeys

We also use the ChannelOPERA tool to analyse employee journeys. But this mainly uses internal touchpoints, unlike in the customer journey analysis. Improving the employee journey brings efficiency and above all increases employee satisfaction ChannelOPERA is available online at http://fyayc.com/products.

22 Integral management system

foryouandyourcustomers uses the established management system for IT companies (visit tqmi.ch) to develop its integral management system. It represents the accumulated experience from the last 20 years and brings fundamental improvements to the daily work of all employees. However, the integral management system is not yet available, which is why we recommend a modified version of tqmi.

23 Q-Report

Quality reports are elementary tools for continuous improvements in companies. All employees can file reports to suggest improvements and changes in the management system and their work. Customer praise and complaints are also incorporated in this process. The status of each report is visible to all users and progress is measured on a quarterly basis.

24 Process maps

A process map defines a sequence of services that employees can initiate or obtain. It belongs in the performance layer, and its elements (processes) are inferred from the requirements of the higher layers of organisation and customers. Whereas the management system models the entire performance layer, the process maps only refer to a certain department. Experience acquired from numerous digitisation projects has been compiled to produce a stable set of process maps that can be reused frequently.

25 Project Charter

Critical projects should consider all six layers of the Exploded View. Additional tools are added to the set from project management to ensure that digitisation ventures are successful. Project Charter is one of these tools; it provides steering and other stakeholders with a quick and clear overview of the status on each layer.

The Exploded View model permits a variety of perspectives. Besides the four presented in this white paper, it also includes the project perspective that facilitates daily work on projects.

26 SWOT analysis

We use a SWOT analysis to assess the status quo within a company. It can be completed quickly and yields a clear impression of the company's strengths and weaknesses, as well as the opportunities and threats on the market. A SWOT analysis based on the Exploded View considers all six layers and yields a far more differentiated result by combining the insights from each of them.

27 Digitisation audit / Status quo on all layers

We conduct audits to ascertain a company's status quo within the digital transformation process. These audits are performed using interviews that are based on an extensive questionnaire. The report is presented to the CEO and includes findings, recommendations and warnings. When conducted regularly, a variety of focus areas can be audited in immediate succession – with simultaneous monitoring of progress.

28 System architecture and system roadmap

System architecture is a basic tool that is used to plan and develop the systems within the company. It should be based on a forward-looking concept and give due consideration to the operational requirements, as well as the particular aspects of the current technologies and employees. System architecture

consists of a CURRENT and TARGET status, which are used to formulate a well-conceived system roadmap.

29 Overview of software systems for digitisation / evaluation tool

A number of typical software disciplines have emerged in recent years. ERP, CRM, PIM, WCM, personalisation, search, etc. In their products, the software vendors focus on one or several disciplines, which they cater to as completely as possible. Companies perform painstaking comparisons to identify the best solution for their system architecture. The overview is a good method to obtain an initial, meaningful long and short list. It contains several hundred providers from all disciplines that are relevant to digitisation, and is updated regularly.

30 Information model

The information model describes clearly all of the entities within the business and their relationships to one another. It is a tool that enables the understanding and comprehensive use of data, whether by a human being or a machine. This tool is frequently applied first of all in our digitisation projects, as it can lay the foundation for virtually all activities within the company.

About foryouandyourcustomers

Founded: 2010 Share capital: kCHF 1,650 Employees: 126 Co-owners: 51 Locations: 14 Countries: 6 foryouandyourcustomers deploys established methods and experienced experts to guide you safely through the digital transformation. We adopt an integral perspective to analyse, advise, accompany and design, paying close attention to the expectations of our customers, as well as their digital maturity and opportunities. To do this, we design, develop and operate suitable PIM, MDM, e-commerce, CMS, CRM and many other systems.

Organisation

It was immediately clear when we founded foryouandyourcustomers that we would become an extraordinary company and a role model. The Group currently comprises 14 cells, each with their own CEO and employees. We do not have headquarters. Synarchy is the organisational form at foryouandyourcustomers. It is our declared objective is to blend being human with business activity.

Services

The competencies for analysis, consulting, support, implementation and operation are developed in these fields.

Each of the cells develops its own portfolio, depending on its skills and the customer needs. Taken together, these services cover a broad spectrum. Hardly any of the customers receive support from just one cell, so the services are constantly combined and develop a high level of quality.

Contemporary Business



Experience Management

Digital Commerce



Customer Orientation



Cloud Architecture / Microservices



Digital Supply Chain



Relationship Management



Data Driven Business



We use the Exploded View model in almost all our projects. We develop the model, ourselves, and our customers steadily.

Contact

Feel free to contact the author of the whitepaper: Jonathan Moeller, Robert Josef Stadler, Axel Helbig, Peter Zwyssig and Stephan Mueller. Alternatively, feel free to contact the location closest to you. Visit our website for all the contact information www.foryouandyourcustomers.com.



Appendix

Contact & Publisher

This whitepaper draws on the experience of many hundreds of projects over the past 23 years. The whitepaper was prepared for executives and employees in companies that are seeking to actively shape the digital transformation and who are looking for suitable models and tools. We believe that this whitepaper can be an important source of inspiration in your work.

We would be interested to learn more about your experience with this whitepaper, the Exploded View model and the tools. Write to us so that we can see things through your eyes. We would gladly keep you abreast by email – perhaps once a year – with the latest development around the Exploded View.

You can contact us at exploded@foryouandyourcustomers.com or by post to foryouandyourcustomers AG, Weiherallee 11b, 8610 Uster, Switzerland

Bibliography

- Berner Stefan: Informationsmodellierung. Durch Verstehen zu besserer Software. vdf Hochschulverlag AG an der ETH Zürich; (2016).
- Ching Francis D.K.: Die Kunst der Architekturgestalltung als Zusammenklang von Form, Raum und Ordnung; Reprint of the 2nd revised and extended edition (1993). We are grateful for the kind permission to use this illustration.
- *Gebser, Jean:* Ursprung und Gegenwart. Part 1 and 2. Novalis Verlag; 2nd edition (1999).
- Koestler, Arthur: Die Wurzeln des Zufalls. Suhrkamp Verlag; (1974).
- Levine, Rick/Locke, Christopher/Searls, Doc/Weinberger, David: The Cluetrain Manifesto, at: www.cluetrain.com; (retrieved on 27/06/2018).
- Möller, Jonathan: Multichannel-Leitfaden: Anspruchsvoll für den Handel. Überraschend einfach für den Kunden. foryouandyourcustomers München GmbH; 2nd revised edition (2016).
- *Porter, Michael E.:* How Smart Connected Products are Transforming Competition. Harvard Business Review; (2014).
- *Stadler, Robert Josef:* Integrales Management, Training Documents Stadler Managementberater, Pfäffikon ZH (2004).
- *Ulwick, Anthony W.:* Jobs to be Done: Theory to Practice. IDEA BITE PRESS; 1st edition (2016).
- Wilber, Ken: Eros, Kosmos, Logos. Eine Vision an der Schwelle zum nächsten Jahrtausend. FISCHER Taschenbuch; 6th edition (2001).

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We are grateful for the kind permission to use the illustrations.

- Figure 1: Francis D.K. Ching, in "Die Kunst der Architekturgestalltung als Zusammenklang von Form, Raum und Ordnung", 1993.

 Figure 13: Michael E. Proter und James E. Heppelmann, in "How Smart, Connected Products Are Transforming Competition". From the Harvard Business Review, November 2014 issue.

Thank you!

A whitepaper is not a book. But in this case it certainly felt like writing one. So I would like to extend my gratitude to all my friends and colleagues at foryouandyourcustomers. This whitepaper would not have been possible without you!

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Jonathan Moeller Uster, July 2018