

# The Digital Coach's Guide to Digitalization

For external Digital Coaches

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## 0. Introduction

What was mass production in the early 20<sup>th</sup> century and automatization in the post-war industry – especially after 1<sup>st</sup> and 2<sup>nd</sup> oil crises, is digitalization today. Modern companies, big and small, seek improvement possibilities to be even more efficient than they used to be. Process thinking and value stream approach combined with KPI systems and efficient management methods that appeared after Second World War, have been developed further in the 1980-90s and attained a high level of sophistication by the 2000s. These systems are now used worldwide and one of their common points is being data driven. Data can be produced, registered, and turned into information manually and half-automated as well – resulting in an increased cost of administration. It's naturally been a key target point for employing organizations to keep the advances of such administration and same time radically decrease the cost of it. Development of digital solutions – including increasing accessibility and affordability of the technology – a new efficiency level of administration and production unfold to companies that embrace this change.

Digitalization can be carried out at different levels and at different segments, or even at different activities within a company. A Digital Coach's key contribution to the journey of digital transformation of such is to identify activities, processes, and segments that are the target of digitalization projects and prepare a roadmap that will lead his/her client to achieve a higher level of efficiency through digitalization.

## 1. Tasks and Responsibilities of a Digital Coach

Looking at all the areas of work that are affected by digitalization, one can easily feel overwhelmed. Starting from transforming analog data, processes, and actions into a digital format (i.e., digitization) to changing and adapting whole business models (i.e., digitalization), digital technologies offer uncountable possibilities for providing new revenue and create value. These changes in the working environment are also influencing the people working with these new technologies as well as the companies and businesses they are working in.

The DC has a vast responsibility to explore the possibilities, highlight the dependencies, stimulate, and orchestrate the decision-making process, plan, and manage the execution... but most of the tasks remain with the corporate executives and the management site. These tasks are mostly to bring the operation and production knowledge into the transformation process and finally make the necessary decisions. Usually, this final act requires the most complex preparation, and the DC should handle it with a lot of patience.

## 2. Skills and Competencies

Digital Coach is a profession that requires theoretical preparedness and practical experience. Credibility and professional, high-quality work are key to gain and keep up the support of the client company's management and employees as well. Digitalization itself is based on methodologies that were shortly mentioned in the Introduction.

## Pre-requisites

The person who intends to be educated as a Digital Coach must have strong management knowledge and experience and must be familiar with the different technologies used in digitalization.

It is strongly recommended to a future Digital Coach to refresh their knowledge in the fields of Project Management, Change Management, and Lean Management before starting this course or alongside.

## Digital Coach Training Modules

At the beginning of the DC’s qualification, one must complete a couple of self-study modules, which were developed by the “Digital Coach” project partners, to acquire knowledge in the following areas and topics:

- Quality Management and Process Optimization as the Basis of Digitalization in Companies
- Challenges of Industry 4.0 for Young Entrepreneurs
- The Maturity Model “ADAPTION” in the Field of Industry 4.0
- Corporate Strategy for Digital Transformation and Agile Project Management
- Possibilities and Limitations of Learning Transfer and Learning Location Cooperation
- Value Creation Processes as Starting Points for Digitalization
- Strategies for Securing the Acceptance of Digital Solutions in Companies
- Limitations and Possibilities of Participation in the Implementation of Digital Solutions
- Development of New Business Models Against the Background of Digitalization
- Corporate Cooperation for the Implementation of Digital Solutions

The contents spanned by these self-study modules aim at educating the future DCs so that they get a basic understanding of Industry 4.0, the relevant developments regarding technological, organizational, and personnel-related changes as well as the potential benefits of these developments.

## 3. Roadmap to Digital Transformation

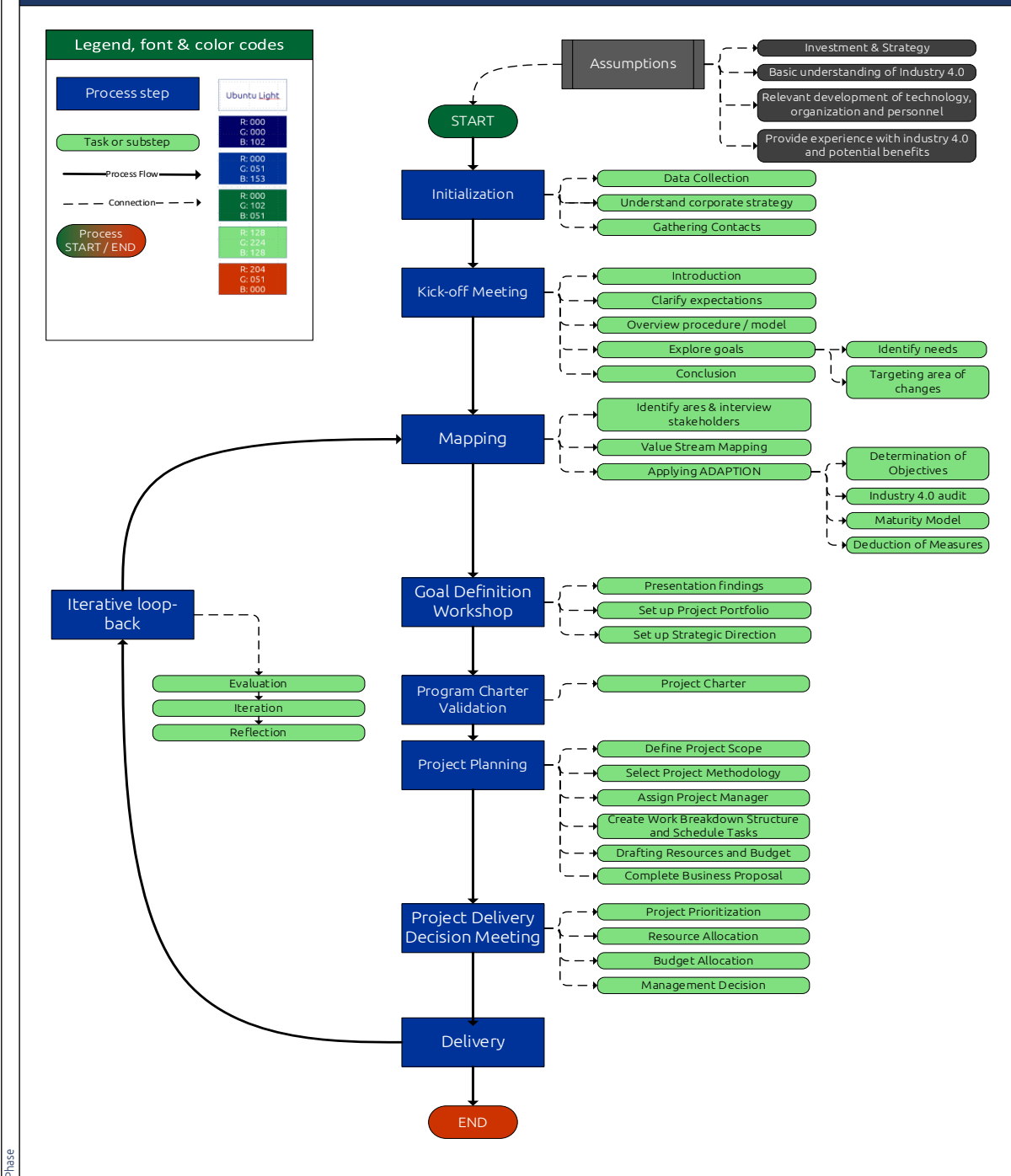
Digitalization of a company requires good preparation, process thinking, and disciplined execution. Digital Coach contributes first to this journey by setting up a realistic Roadmap to Digital Transformation that considers the current digital status, resources, and human competencies of its client. Second, Digital Coach assures delivery of projects through control, feedback, and high-level support to project managers. Good preparation and good planning are a half success, being said, and what is important is planning – not the plan itself. Think of Digital Transformation as a journey that leads your client and its organization to a better future status than the current one!

### 3.1. Objectives & Methodology

The objective of the Roadmap or Customer Journey is to equip Digital Coach with a Tool that leads the planning of the Digital Transformation Program of its client through logical steps one by one assuring the best preparation for the execution. This journey is a process: it has a start and an end; inputs and outputs; goal, tasks, owners, and process steps to go through.

# Roadmap to Digital Transformation

## Process steps and related tasks



## 3.2. Step 00: Assumptions

We assume that the company has strong motivation and is dedicated to starting a digitalization project. We identified four key aspects that generate demand for Digital Transformation. If these assumptions are not valid, it is important to question the viability of a digital transformation program. It is still possible to target digitalization as a future state in long term (> 3-5 years) however, in the absence of the below assumptions Digital Coach may suggest the management start a program that prepares the company for digital transformation and creates the basics of such.

### Investment & Strategy

- We assume that the management is aware that Digital Transformation is an investment in the future.
- We assume that the management knows that the investment's return could be more than 6-18 months.
- We assume that the management understands that all kind of digital transformation requires an infrastructural backbone (NW HW SW) to fulfill its functions.
- We assume that the company has a forward-looking business strategy (for min 2 years) in place.
- We assume that the company has already digitalized the basic operation and administration (ERP system is implemented for finances and inventory).

### Basic Understanding of Industry 4.0

We assume that there is a good understanding of Industry 4.0 within the company's knowledge & culture.

### Relevant Developments in Technology, Organization, and Personnel

We assume that the company has made or plans to make relevant developments in technology, organization and personnel that create a solid technical and knowledge base for digital transformation.

## 3.3. Step 01: Initialization

The first step of the process is Initialization. This step includes preparatory tasks to understand the overall picture of the company from three key aspects: data, contacts, and strategy. What type of data is already available about the company and its processes? How do they collect the data? Who will the Digital Coach work with during the transformation program? What is the place of digital transformation in corporate strategy?

If you can answer well these questions, you probably understand well the company you'll support on this journey.

### Data Collection

It is important to understand data that is available about the company and its processes before a Digital Coach can sketch the transformation program. It is strongly recommended to spend enough time requesting and surveying this type of information.

Start with high-level data, such as P&L and other officially accessible statistics about the company and its competitors. Check financial and marketing data in annual reports if available or, ask the company to

provide you with this information. Rank the company from a size and efficiency point of view on the market based on financial and marketing data.

Then, try to understand how well the management is supplied by high-level internal, non-financial data, typically in form of KPIs. Check if main departments report KPIs regularly or not, and what type of KPIs they do. Some examples are: On-Time Delivery or Customer Delivery Performance, Service Level, Inventory Turnover, Scrap Rate, Master Schedule Attainment, Response Rate for RFQs, Supplier On-Time Delivery, Tender Success Rate, Service Availability, etc.

Continue with detailed data collection at an operational level. Check if there is any data collection of operations such as Cycle Times, First Pass Yield, OEE, and different types of internal and external Lead Times. All in all, check if there is any data collection at the line or workstation / operator / employee level.

Don't forget to check and understand the methods used for data collection: manual, paper-based, automated, digitalized, continuous or sample-based?

Make a summary of your information collected about all types of data available about the company. Make a rough estimate of the possible development of the company from the available data point of view. This will help you to estimate better the scope and challenges of your transformation program regarding data collection and analysis.

## Gathering Contacts

Try to understand and know contacts at the company whom you'll need to work with during this journey. Make sure you get to know decision makers at different decision levels. If possible, create RACI matrix to ease your work with future contacts upfront. This will help you to know people you'll have to work and cooperate with and will also help you to understand organizational structure and possible missing or not filled key positions. All this information will help you to see some of the human and organization-related challenges you might face during your program.

## Understand Corporate Strategy

Formally or informally, a strategy exists at the company. Maybe it is extremely simple and consists only of 1-2 financial elements ("high profit – low costs"), maybe it is complex and broken down to project levels. Regardless, it's important to understand it as you need to be able to place and position the digital transformation program into it. Were you asked to create and roll out this program because it is a part of a tender won in some EU-funded program and it is mandatory to do it? Have you been hired because the management is willing to modernize the company using its own budget and your work is in focus? Is your program part of one of the dozens of projects the company rolls out this year and you'll need to compete with other projects for a budget? Understanding management ideas and strategy, resource allocation, and support behind your program can be crucial.

### 3.4. Step 02: Program Kick-off Meeting

The main goal of a Digital Coach with the kick-off meeting is to establish a mutual understanding between parties about the goal of the digitalization project or projects, the process, and how and in what form the Digital Coach can facilitate the journey they are about to begin.

The kick-off meeting should also start with preparation as “Phase 0”. DC should prepare an introductory material so later it will be clear to everyone what digital transformation is about and what are its limits. It is also important to emphasize what are the success factors for such projects and what results in what timeframe are expected. This information might not be clear to every participant beforehand.

The success of the kick-off meeting is also dependent on attendants. Who should be invited? At this point, it is not completely clear what stakeholders at the company will be involved in the project, so this decision must be made together with the initiator of the project from the company. Inviting people with management responsibility and from similar hierarchical levels is preferred. Having the sponsor at the kick-off meeting can be also beneficial since this person should be bought-in in the first place to have a successful project. At large firms usually, the CIO (Chief Information Officer) is responsible for digitalization projects whereas in smaller and middle-sized companies the CEO takes this role.

The kick-off meeting should be planned in time. Since the participants are most likely from the management level, time planning should start at least 2-4 weeks before the event takes place – sometimes even more. Prepared material must be sent to the participants so they can come to the meeting prepared, and they can ask questions either on the spot or even before the meeting. Questions coming from the team before the meeting are useful because it gives time for the DC to prepare and even tailor the introductory material to the needs of the teams. Well before the kick-off meeting, an agenda must be sent out to participants. The duration of the kick-off meeting also must be decided based on initial project objectives and the availability of the participants. In some cases, a one-day kick-off meeting is sufficient, in other cases, multiple days are necessary to cover all points in the necessary depth.

## Introduction

At the meeting, the first point should be the introduction of the DC. The initial introduction is preferably done by the project initiator, and it is followed by a self-introduction by the DC where they explain their background and build up credibility and trust in the eyes of the participants. Since this is the first time the DC meets the kick-off team, all other participants must introduce themselves as well. It is useful if the DC asks the participants about their role in the company, background, and initial ideas about the project. This information will be useful later during the stakeholder mapping and analysis. At this point questions from the participants can be collected so later during the process overview these questions can be answered. In the introduction, the DC should explain what digitalization means and how companies benefit from it. It is of utmost importance to show what goals companies can reach and how digitalization influences strategy, processes, and organization. Showing how it contributes to business performance through showing success stories can create a deeper understanding and can already help the participants to start thinking about how digitalization can contribute to their company’s or their department’s performance. On the other hand, pitfalls of digitalization projects should be pointed out as well, so the project teams can be aware of them and try to avoid falling into them later.

## Clarify Expectations

It is essential if DC is able to clarify the benefits of the digital coaching process at the beginning. DC should explain to the stakeholders what they can expect as a result of his job and the process orchestrated by him. The benefits must be measurable values, for example, an increase in the efficiency, a higher level of the profit rate, increased market share, etc. It is also important to clarify stakeholder expectations and at the end of the digital coaching process return and compare the result of the project with the preliminary expectations.

## Overview Procedure / Model

During the process overview, the DC should explain the different steps during the digitalization project. For each step, the necessary activities and their methodological basis should be presented. Furthermore, the connection between the steps and how the following step builds on the information or outcome of the previous step should be explained. It is also important to present the expected intermediate results for each step and the decision points. At the decision points if it is necessary iteration loops can be created. The introduction of the ADAPTION model is essential since it creates the backbone of the process.

### Explore Goals

After reaching a mutual understanding of what the goals of digitalization projects can be and how the process and the DC can facilitate reaching those goals, the participants should start exploring how digitalization can be relevant and helpful for the company's business performance in different areas. At this point, the team should not focus on coming up with detailed and specific goals. The aim is rather, that possible areas of change are identified.

This is an idea generation process that can be conducted in many formats. The exact format should be decided by the DC-based on their experience and the members of the kick-off team. The most used format for idea generations is brainstorming. This format does not require special preparations or a high level of expertise neither from the DC nor from the participants. The DC should act as a moderator and make sure the team is not hindered by some of the disadvantages of this method which can be spending too much time on certain ideas, coming up with too utopian ideas, or some team members trying to dominate the discussions. It can be useful to make multiple rounds of brainstorming starting from the big picture, identifying general business areas of a possible implementation of digitalization, and then narrowing it down to more specific goals or needs. The level of detail must be determined by the DC.

### Conclusion

The kick-off meeting is usually an intensive experience for the participants and for DC as well. At this stage, a lot of ideas are formulated, and some questions can stay unanswered. These ideas and questions must be captured in the meeting minutes. The formatted meeting minutes should be shared with the meeting participants as soon as possible. At the end of the meeting, it is also important to agree on the next steps and start planning the activities for the next phase.

## 3.5. Step 03: Mapping

### Identify Areas & Interview Stakeholders

At the Kick-off Meeting, goals and areas of change have been identified. The next step is to get an overview of the people and processes that make up these areas. Digital Coach might initiate 1-2-1 meetings or team meetings with key employees and managers and go through some basic interview questions that can reveal improvement possibilities and typical pain points. Consider these interviews and discussions as the qualitative part of your "survey". Value Stream Mapping on the other hand can be considered as the quantitative, data-driven part of the task you perform.



## Value Stream Mapping

Every “area” of a company contains processes – formal or informal – that are consecutive steps of activities made by people and tools to fulfill a need or demand. Understanding the processes of the area to be changed is critical, hence, it’s important to use efficient business tools that help understand them. Different business process maps (or diagrams) are being used for this purpose, most popular are process maps, cross-functional flow charts, and value stream map. A standard specification also exists for business process shapes and notation under Business Process Modell & Notation<sup>1</sup> (BPMN) and ISO 19510. You can use any of the mapping techniques, choose the one that fits best to you; keep in mind the intention of process mapping, and find the answer to these questions using them:

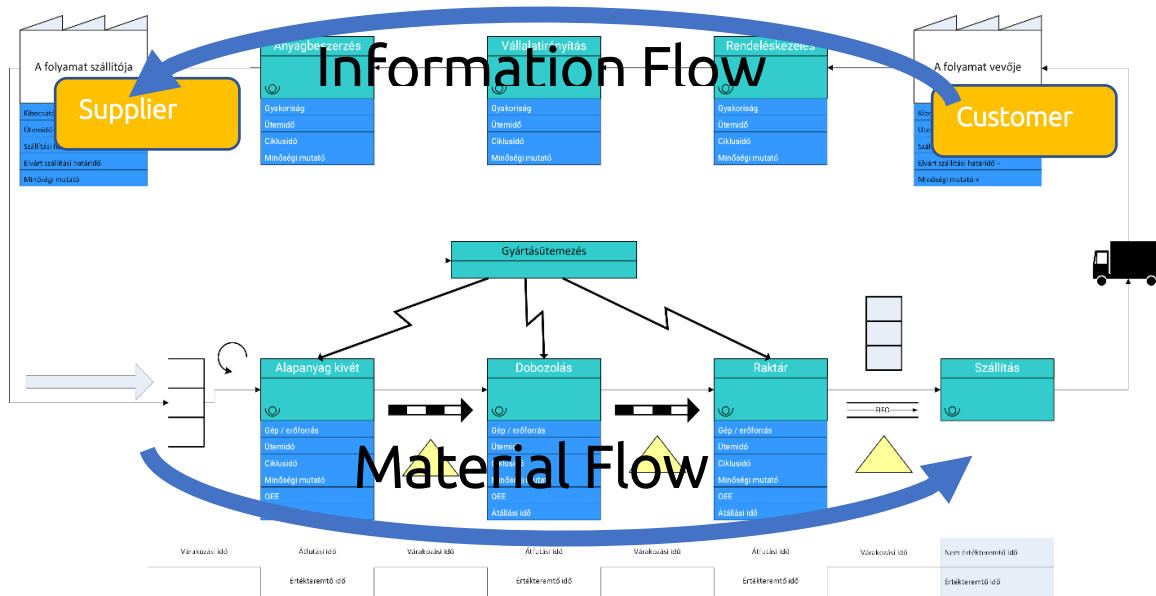
- 1) What are the key processes that are being operated in the area of change?
- 2) What is the level of complexity of the processes – how many process steps are included, how many resources they consume, and how many different products they handle?
- 3) What is the performance level of the processes in terms of?
  - a. Delivery, such as:
    - i. Lead Time,
    - ii. On-Time Delivery
    - iii. Service Level etc.
  - b. Quality, such as:
    - i. First Pass Yield,
    - ii. Customer Complaint Ratio,
    - iii. Cost of Quality etc.
  - c. Cost, such as:
    - i. Value Add Time Ratio,
    - ii. Productivity,
    - iii. Maintenance etc.
- 4) What is the level of stability of the processes? How well average performance of the above KPIs describe the process? Are standard deviations “far<sup>2</sup>” from averages?
- 5) What is the level of digitalization of the processes and process steps?
- 6) What are the improvement possibilities of the processes that can be brought by digitalization? Such as: complexity reduction, stabilization, higher performance, and higher quality.

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<sup>1</sup> <https://www.omg.org/bpmn/>

<sup>2</sup> Use Coefficient of Variation (CV) to describe stability of the process. Calculate average or mean performance, standard deviation and divide deviation by average or mean. Express the result as percentage. The higher the result, the lower the stability. Learn more at: <https://www.isixsigma.com/dictionary/coefficient-of-variation/>

The picture below is the scheme of a Value Stream Map<sup>3</sup>. A Value Stream Map always describes the process as a cycle, starting it at the *customer*, in the right upper corner. Starting from customer left to right, the upper flow is called the *information flow* that describes steps that bring information from customer to supplier of material (the most left-upper cell on the map) and to the production. The lower flow from supplier right to left is the *material flow*, which describes the process steps of production using material and information. At the end of the cycle, products are delivered to the customer. Keep in mind, that value stream maps had been developed to map production processes, however, they are useful to map administrative processes or services as well. What makes it more difficult to map these is that, typically, administration and services are less standardized by default than production. Therefore, it is more difficult to measure their performance and deviations are generally much higher.



### Applying ADAPTATION

The ADAPTATION model is a key part of the Mapping exercise. Proper usage of the model will situate the chosen areas' development level in terms of digitalization, and target levels can be also identified. Learn more about the model and how to use it in chapter 4: [FEHLER! VERWEISQUELLE KONNTE NICHT GEFUNDEN WERDEN..](#)

### Other Tools

There is no one-fit-to-all type of guideline or chart to perform the analytical exercise (Mapping) of the case. Value Stream Mapping and ADAPTATION model can be considered must-have tools, and they can be completed by several business tools that are commonly used:

- 1) KANO model. Use the KANO model to understand customer behavior and the impacts of development projects on customer satisfaction. Learn more at: [https://en.wikipedia.org/wiki/Kano\\_model](https://en.wikipedia.org/wiki/Kano_model)

<sup>3</sup> <https://kanbanize.com/lean-management/value-waste/value-stream-mapping>

2) SWOT Diagram. SWOT is an acronym for Strengths, Weaknesses, Opportunities, and Threats. These four factors make up the SWOT MATRIX. A SWOT analysis can be used to measure an organization's competencies and identify opportunities to be taken by business management in the future. Learn more at: <http://www.swotmatrix.com>

SWOT Matrix

Strengths	Weaknesses
Opportunities	Threats

- 3) Decision Tree (Lucidchart). The biggest benefit of a decision tree is that it can take emotions out of the equation... decision trees can be used to evaluate just about any question or concern and visualize possible outcomes. Learn more at: [https://www.lucidchart.com/pages/how-to-make-a-decision-tree-diagram/#section\\_0](https://www.lucidchart.com/pages/how-to-make-a-decision-tree-diagram/#section_0)
- 4) Pareto Analysis The value of the Pareto Principle ... is that... it focuses on the 20% of things that matter. ...That 20% produces 80% of your results. Identify, and focus on those things first, but don't entirely ignore the remaining 80% of the causes. Learn more at: <https://www.projectsmart.co.uk/pareto-principle/pareto-analysis-step-by-step.php>
- 5) Kurt Lewin's Force Field Analysis Model. Weight the driving forces for change against the resisting forces. Watch this video: <https://www.youtube.com/watch?v=ctH27sCQxv8>
- 6) Cranfield Benefits Dependency Network. This tool seeks to get managers to identify and map all the changes that they will be required to make if expected benefits and outcomes are going to be delivered. It also illustrates very clearly how this change will be enabled and shaped by digital technologies. The resultant network shows how each of the expected benefits will be delivered through a combination of technology and business changes and how these are related to each other. Learn more at: <https://hbr.org/2016/06/a-tool-to-map-your-next-digital-initiative>
- 7) Strategy Map. A strategy map is a diagram that shows your organization's strategy on a single page. It's great for quickly communicating big-picture objectives to everyone in the company. It's a visualization of a Balanced Scorecard. Learn more at: <https://www.spiderstrategies.com/strategy-map/>

- 8) Hoshin Kanri X matrix. We highly recommend the Hoshin Kanri X-matrix – a widely publicized tool of Lean Management. This is a single-page table that includes goals, strategies, strategic projects (initiatives), and owners (this could be also a later step of the evaluation). Learn more at: <https://kanbanize.com/lean-management/hoshin-kanri/what-is-hoshin-kanri-x-matrix>

HOSHIN PLANNING MATRIX (X-MATRIX)			
<ul style="list-style-type: none"> <li>PILOT culturally diverse idea incubators that drive ideation and disruption</li> <li>Increase customer engagement in product design</li> <li>Reduce customer complaints</li> <li>Increase customer loyalty</li> <li>Deploy Performance Excellence improvement methodologies</li> <li>Increase overall market share in SW territory</li> <li>Increase number of new interactive packing customer accounts</li> <li>Develop new distribution channels for new digital packaging</li> </ul>			
<ul style="list-style-type: none"> <li>Achieve 25% market share of the new digital packaging service</li> <li>Develop at least 10 new products with a vitality index above 65%</li> <li>Grow total revenue by \$75 million</li> <li>Reduce all process waste by 40% using sustainable improvement methodologies</li> </ul>	<p><b>Top-Level Improvement Priorities</b></p> <p><b>Annual Objectives</b></p> <p><b>Target to Improve</b></p> <p><b>3-5 Year Breakthrough Objectives</b></p>	<ul style="list-style-type: none"> <li>Increase active distribution channels by 6</li> <li>Achieve 20% of incremental revenue growth from new customer accounts</li> <li>Increase market share in the SW region by 15%</li> <li>Implement Performance Excellence in all 8 business units</li> <li>Reduce customer complaint calls by 50%</li> <li>Reduce PD Team turnover by 25%</li> <li>Increase customer second product conversions by 25%</li> <li>Increase number of customers with contracts longer than 5 years to 40%</li> <li>Establish three successful incubators</li> <li>Increase the number of ideas going into stage 2 (Feasibility) by 50%</li> </ul>	<ul style="list-style-type: none"> <li>Fred Burtelson (Chief Innovation Officer)</li> <li>Jim Gruber (VP of Quality)</li> <li>Dave Hies (VP of Marketing)</li> <li>Mark Miller (VP of Sales)</li> <li>Nancy Beckley (VP of Accounts)</li> </ul>
<ul style="list-style-type: none"> <li>Achieve world-class quality production as certified by Malcolm Baldrige standards by the end of 2017</li> <li>Create an empowered culture of collaboration resulting in a 200% increase in new products launched by the end of 2018</li> <li>Achieve 50% market share of the new digital packaging service by the end of 2018</li> <li>Grow total revenue by \$250 million with an EBITDA of 18% by the end of 2019</li> </ul>		<p><b>RESOURCES</b></p> <ul style="list-style-type: none"> <li>● Primary Responsibility</li> <li>○ Secondary Responsibility</li> </ul> <p><b>Jack Speers (CEO)</b></p>	

### 3.6. Step 04: Goal Definition Workshop

Setting up and delivering a successful Goal Definition Workshop is one of the most important tasks of a DC. At that moment DC has already finished gathering and scrubbing all the necessary information that is needed to suggest business alternatives for the management and force a decision on the future direction of changes. This is a one-time opportunity (possible to deliver at multiple events) for the DC to help its customers to make the most optimal setup for the future.

It's ideal if the DC can organize a full-day workshop for the Business Decision Makers for resolving all the goal settings at once. To do this, the DC should ensure the necessary equipment like screens, boards, etc. Sometimes, it's more realistic if there are separate presentations a program portfolio, and direction definition events.

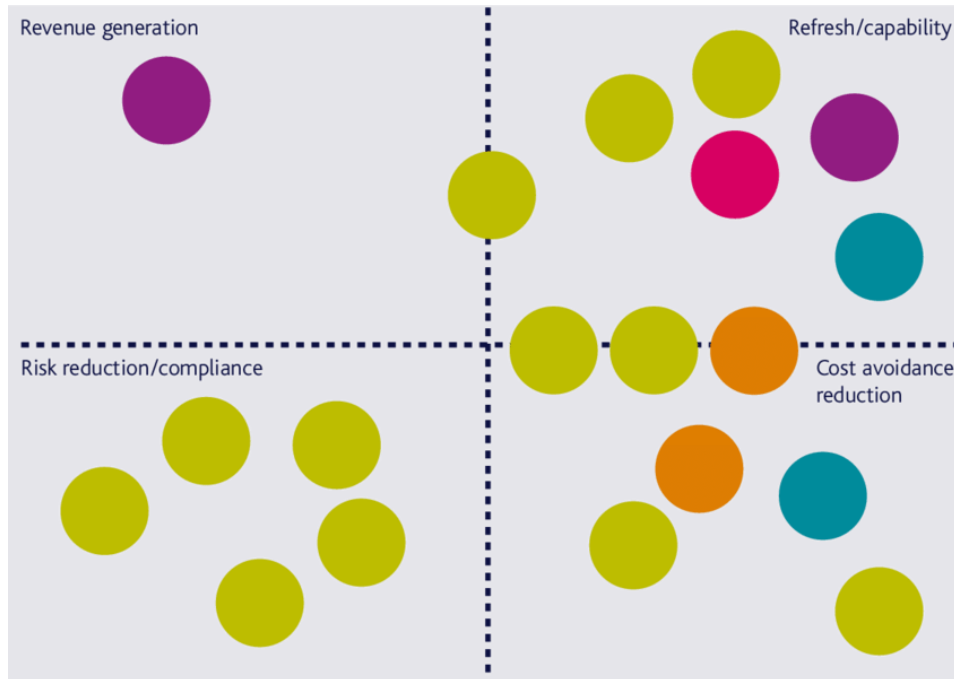
#### Presentation of Mapping Results

The executive board or the corporate management usually has a limited time to understand the explored results. The DC's duty is to find the most efficient way to present the findings. If the management already has some prescribed methodology for this purpose then the DC is expected to prepare his findings in the given format.

## Setting up Project Portfolio

As a result of the Mapping process, there are several small or big, easy, or complicated potential changes that can improve the chosen area. All together they make a list of independent and dependent activities the Digital Coach can structuralize and create a project portfolio. The purpose of this portfolio is to help the corporate management to prioritize and decide on project order. With this knowledge the DC can suggest the resource and cost allocation of the entire program. There are two typical presentation modes for project portfolio depending on the desired goals:

- 1) Revenue/Cost perspective. Learn more at: [https://www.researchgate.net/figure/Example-project-portfolio\\_fig1\\_48990022](https://www.researchgate.net/figure/Example-project-portfolio_fig1_48990022)



- 2) Cost and Effects Analysis. Learn more at: <https://chemquest.com/sand/time-tested-approach-to-project-portfolio-management/#post/0>

## Set up Strategic Direction

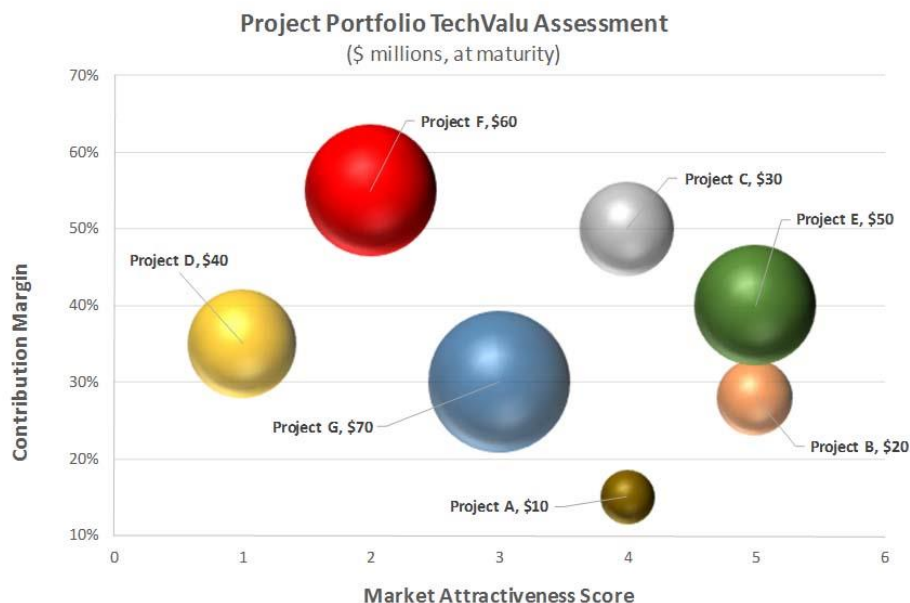
To start an efficient digital transformation, it's essential to set up and announce a Strategic Direction. This direction should be closely connected to a trusted source (owner, CEO, BDM...). The strategic direction helps to clarify the company's objectives and how it plans to accomplish them. Allocates the required resources and identifies the responsibilities to achieve success. The DC just helping this declaration with the necessary data and formulation.

### 3.7. Step 05: Program Charter Validation (go/no-go Decision)

Using project portfolio and the valuation of projects based on revenue/cost or cost/effects analysis, the management of the company might decide on the list of projects to be executed and give them green light.

### 3.8. Step 06: Project Planning

The Project portfolio consists of the list of potential projects which are required for the company's digital transformation set in the previous section.



Project planning is a discipline addressing how to complete a project in a certain timeframe, usually with defined stages and designated resources.

The aim of the Project Planning phase creating high-level project plans for priority and budgetary purposes.

## Define Project Scope

The DC's task is to find the proper business owner within the company for each project. Led by the business owner a stakeholder team should be formed. This team is responsible to define the exact scope of the project with milestones and deliverables.

## Select Project Methodology

When the project's scope has been set, the DC can suggest project methodology for each project. Depending on the scope and deliverables it can be either Agile or Waterflow or a mixture of the methodologies.

At the beginning of digital transformation, the deliverables in most cases are just ideas and the project scope is uncertain. In that case, Agile is the right choice for the development.

Agile is such a methodology that originated from software developers to build software iteratively and collaboratively across self-organized, cross-functional teams. As opposed to a waterfall, where the business owner can see all benefits of the development at the end of a project, Agile provides incremental results by delivering value in sprints rather than all at once. Applying Agile, bi-weekly deliverables minimize the risk of deviation from the project scope.

## Assign Project Manager(s)

Each project requires internal and external (supplier) project management. It is the DC's responsibility to find internal project management resources within the company. Depending on the number of projects and the project complexity one or more persons should be assigned to the project portfolio. The DC can help in the PM selection process, he can define the profile of the PM including necessary skills, competencies, and experience.

## Create Work Breakdown Structure and Schedule Tasks

Each project must be planned as detailed as the project manager can. In that phase, the DC can help the work of internal project managers.

The PM's task is to make a high-level task list and schedule them by considering their context. To make a proper project plan, it is required to involve potential suppliers in the planning process and consult with them.

## Drafting Resources & Budget

To make further business decision and/or make a ROI calculation, it is necessary to estimate the required budget for each project. The budget consists of suppliers' charges and the cost of the internal resources.

At this stage it is worth starting an RFI process, asking for budgetary proposals for each project delivery from potential suppliers. Supplier proposals can contain estimated internal resources as well. It is the role of the internal project manager to lead this process. The PM can involve the purchasing department of the company if it is required. The DC can support the work of the PM.



## Complete Business Proposal, Calculating Return on Investment

After collecting all budgetary information for each project, it is mandatory to complete a business case for each of them. The DC can help the PM with business case forms and methodologies if the company doesn't have its own one. The business case form should include such information for example: as a result of business cases, the management or the business owners can see how fast the projects pay off. The business case form should include such information for example:

Project Business Case Example			
Project Name	Sales Team IVR Telephone System		
Project Sponsor	Head of Sales	Project Manager	Name of project manager
Date of Project Approval	3rd March	Last Revision Date	3rd March
Contribution to Business Strategy	Our strategy is to project best in industry customer service, and the current situation does not reflect this. The new IVR system will ensure all calls are answered in a timely manner. It will also ensure that calls are dealt with efficiently. These two facts align this project to the company strategy.		
Options Considered	Options considered included: 1. Adding additional staff to sales team 2. Having a dedicated team for our best customers 3. An IVR system (selected)		
Benefits	1. Increased sales - currently estimated we lose 4% of all sales calls due to current issues. 2. Happier customers - we estimate new customer satisfaction will increase by 10%. 3. Improved LTV - lifetime value of customers will increase by 5% due to the two points above		
Timescales	Initial analysis shows that the system will take approximately 3-4 months to implement.		
Costs	IVR software = \$35,000 Project Management = \$30,000 Software team of 3 for 3 months = \$90,000  Total estimated cost = \$155,000		
Expected Return on Investment	Year 1 = \$0 Year 2 = \$120,000 Year 3 = \$180,000 as LTV begins to be felt.		
Risks	Right now the project looks pretty straightforward but there are still some unknowns surrounding implementation. There is also the risk that the project doesn't meet the sales team or customers needs. For this reason it is recommended to involve the sales team closely.		

### 3.9. Step 07: Project Delivery Decision Meeting

The input of this meeting is the summary of all planned projects which are suggested to execute.

The summary should contain the list of the projects, scope, goals, KPIs, budgets, internal resources, potential suppliers, and the Business Case. Based on that information management can decide on which project will be executed, postponed, or rejected.

#### Project Prioritization

The management team should define the relevant conditions. Conditions can be weighted according to their importance compared to the company's digital strategy. The result of weighted conditions will determine priorities between projects.



## Resource Allocation

Each project requires internal and external resources. The management team should evaluate the resource plan of projects and check budget availability and the readiness of internal resources.

## Budget Allocation

Based on the priority list, management distributes the available budget among the projects.

## Management Decision

Comparing plans and the budget with the priority list, management shall decide which projects can go to the delivery phase, which one is rejected, or postponed for later execution.

### 3.10. Step 08: Project Delivery

When the required projects are selected for execution, the process gets to the delivery phase. If more than one or two projects are selected, it is essential to form a program and supervise each project's performance together with a program manager. The DC's role in that phase can be either the program manager or quality manager who is responsible for the overall result of the projects.

The first step is to start a bid process and select and clarify potential suppliers for each project. Depending on the customer's purchasing processes, at this stage, the purchase management department will be involved. As a result of the competition the best suppliers are selected, then each project execution should start.

The second step is to define project organizations, governance models, and roles for each project. The DC role should name in the governance model at the project or program level. This is the task of the internal and supplier's project managers.

Next, the delivery phase of the project cycle follows different stages including design, development, testing and readiness, and cutover or go-live. Each stage may be cycled through multiple times, depending on the complexity of the project or the project management methodology that is selected before.

During the project delivery, the DC should supervise the execution, controls the quality of the process, and helps the project manager's job. His main task is to keep the digitalization goals in focus.