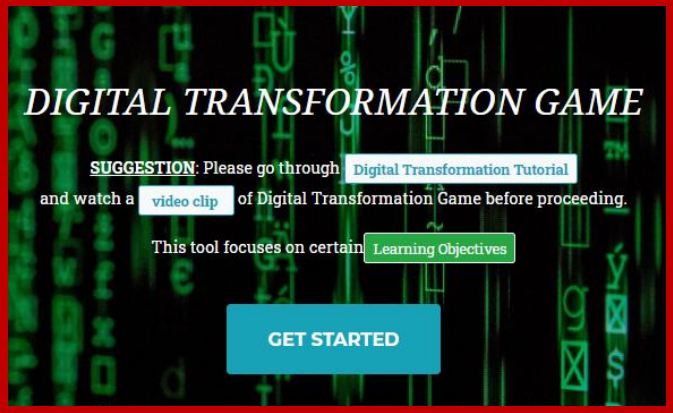
Digital Transformation Advisor and Planner (DTAP)

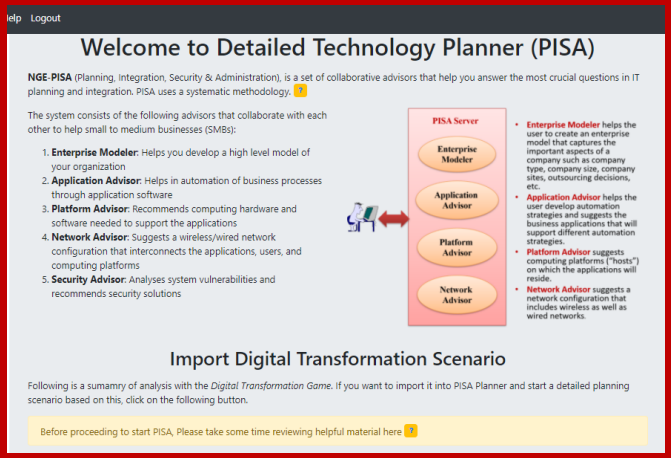
From Strategic Analysis to Implementation of Strategies

ANALYSIS



BRIDGE

IMPLEMENTATION



Highlights of Digital Transformation Advisor

url = Digital Transformation Game (ngespace.com)

Top Features of the Digital Transformation Advisor

1.Consists of 4 simple steps and then a quiz

2.Asks the users to specify the objectives of the transformation. This information drives the results.

3.Covers all 191 countries

4.Supports digital transformations in 8 sectors, will include more sectors and initiatives such as smart cities and communities later

5.Suggests a strategic approach based on stages of automation

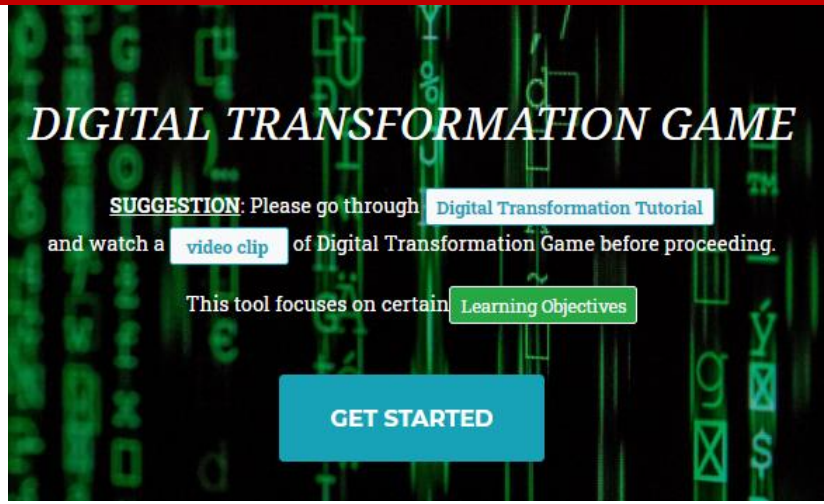
6.An 8 dimensional model shows which technologies are being used

7.Includes an Assessment Quiz at the end to assure that the users have understood the concepts. Users can try the Quiz many times to improve learning

8.Includes training materials for a Hands-on Training Workshop

9.For OECD countries, the concepts from their Go Digital Toolkit (the 7 factors) are being used, the actual data will be used in the future (V2.0)

10.Currently is being integrated with a detailed planner that could be invoked to produce an actual working system (V2.0)



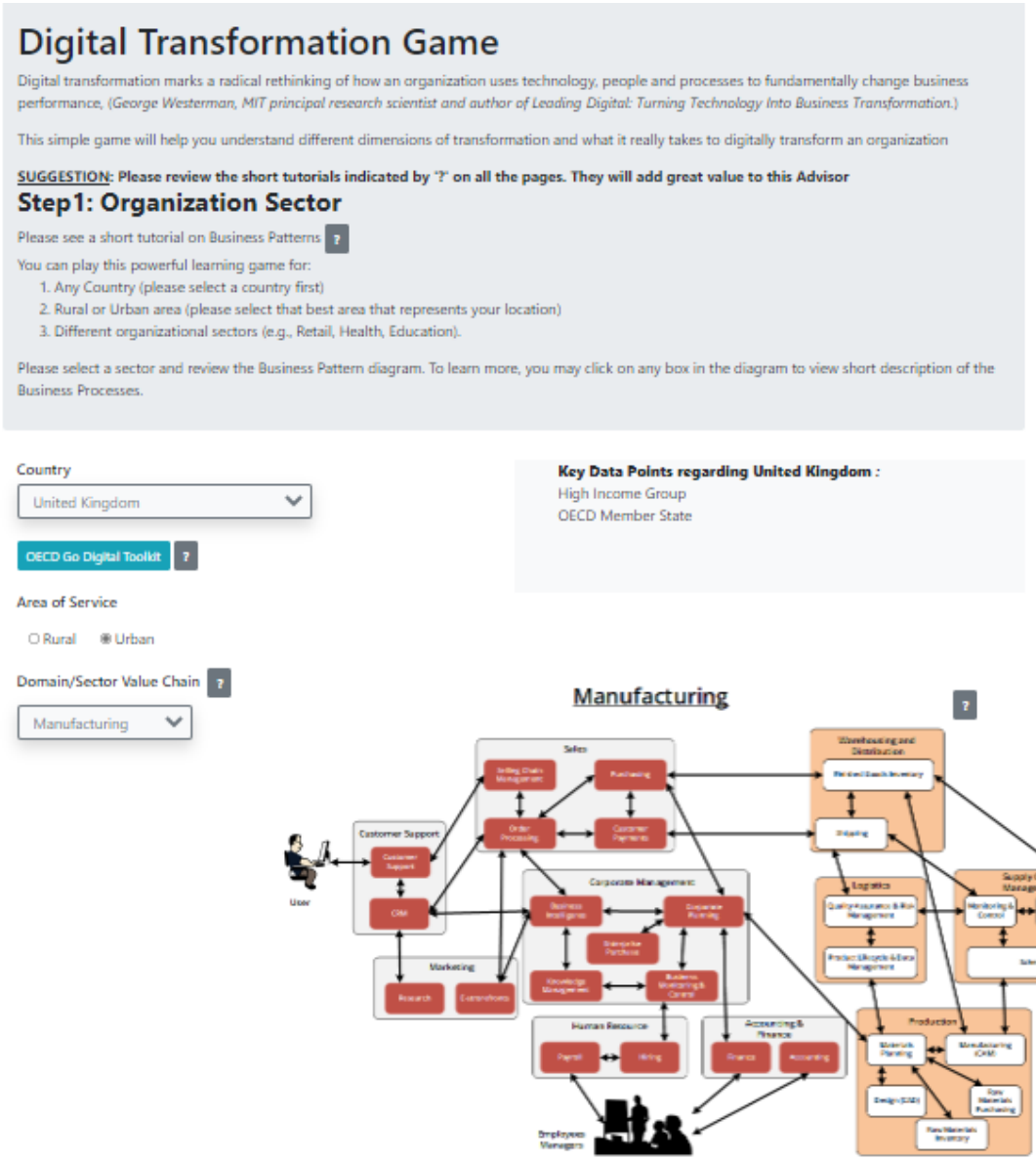
Additional Features:

- Includes Learning objectives and a Quiz that is based on the learning objective
- Objective of the game is to get maximum score in the Quiz
- Anyone can use it by requesting a Guest ID
- Each screen has “?” that explains the concepts being used

Step1: Location and Sector Selection

- In this step, please select a country first, then rural or urban area.
- Then select an industry/organizational sector (e.g., Retail, Health, Manufacturing).
- The system automatically determines the technological and economic status of the location and industry situation in that location. For example, if the country is an OECD, then OECD data is used automatically.
- By clicking on any box in the diagram, you can view short description of the Business Processes and learn more about these industry patterns

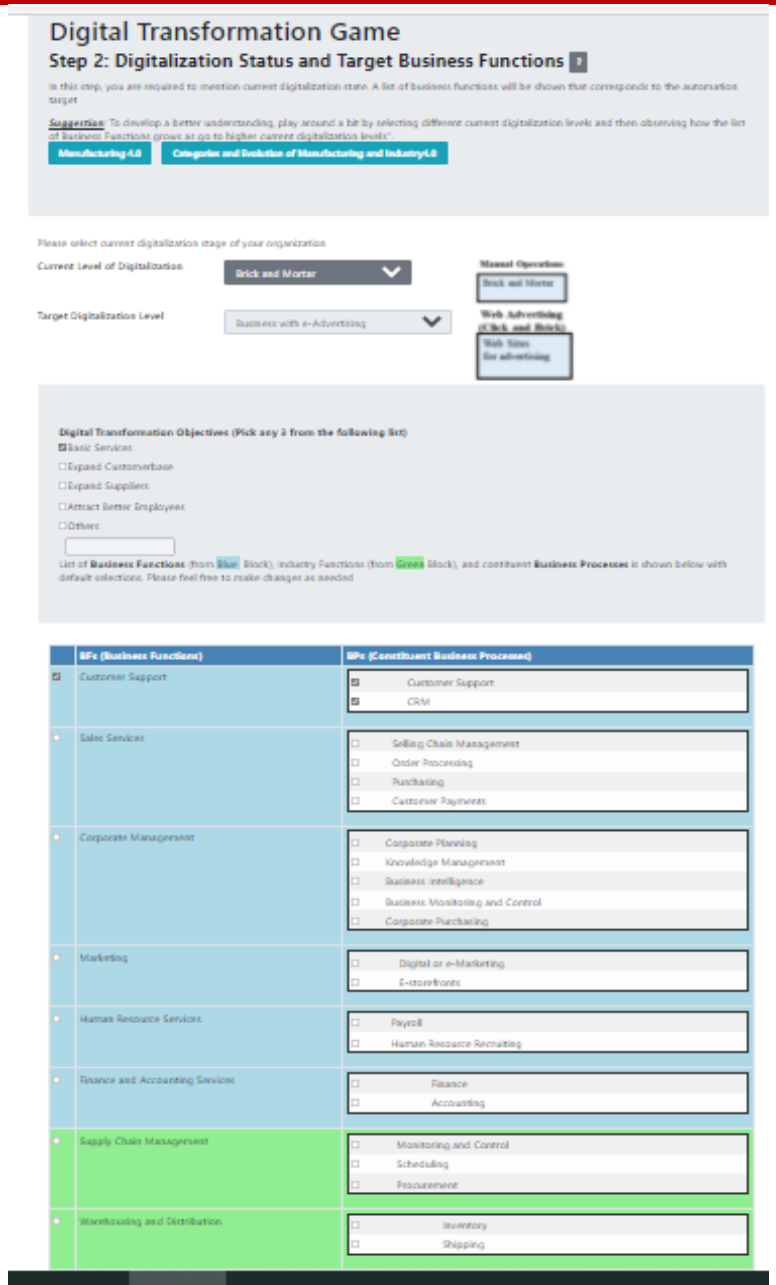
NOTE: The information captured in this step will drive many decisions in this intelligent tool. . For example, higher stages of automation (e.g., Stage4) are only feasible in OECD countries. Please try different options to better understand this feature. .



Step 2: Digitalization Status & Target Business Functions (BFs)

- In this step, please select a current digitalization state (e.g., brick and mortar).
- The system automatically will suggest the next (target) state of automation and will also show a list of business functions that could be automated (e.g., CRM, Purchasing). .
- The user specifies the main objectives (goals) of the transformation, e.g., Survival (basic services), Expanding customer base, Expanding suppliers).
- Depending on the objectives, this tool suggests business functions that should be automated to meet the transformation objectives. For example if the objective is Survival, then Customer support and Sales is selected; if Customer satisfaction then just automation of CRM; for more suppliers, automation of supply chains and warehousing, etc).
- For user convenience, the system shows common business (blue) and industry specific (green) functions.

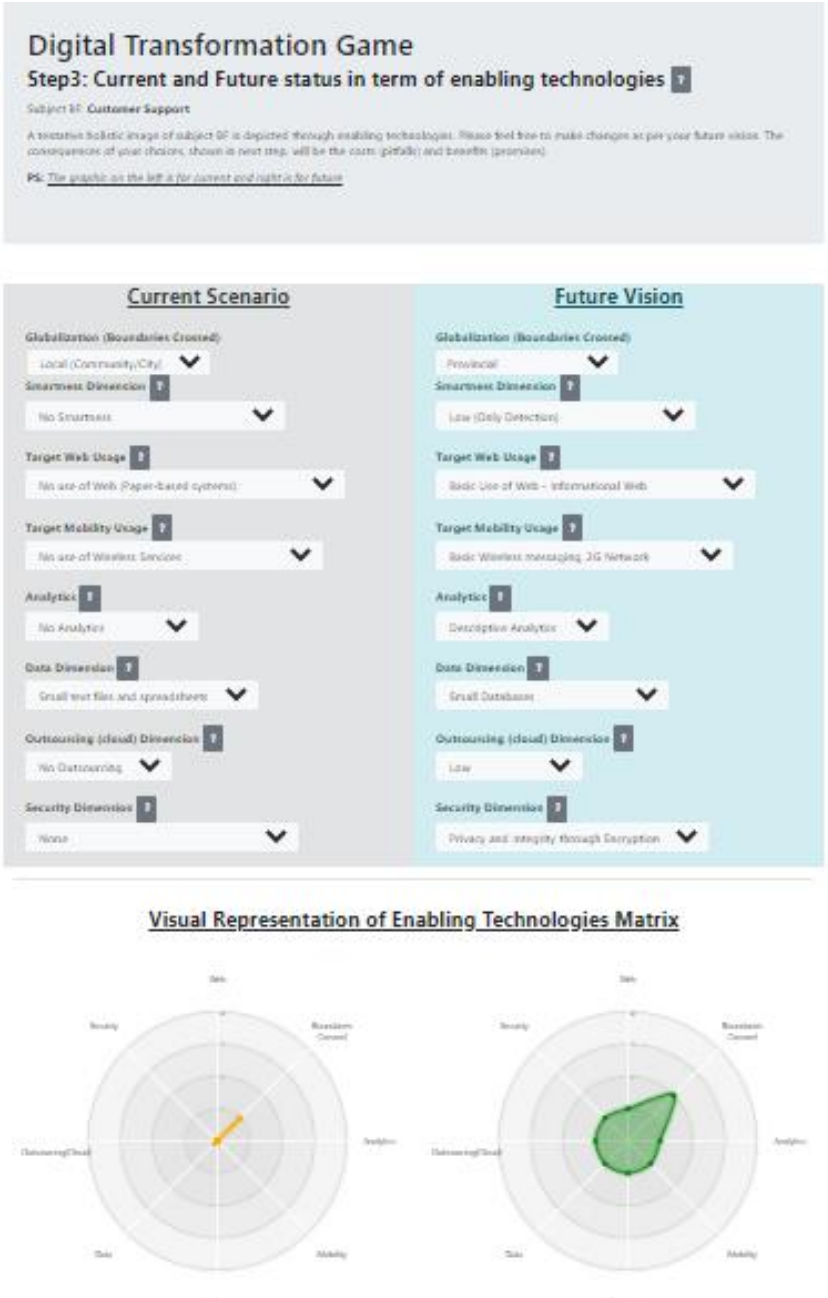
NOTE: For better management control, please do not select more than 2 or 3 functions to automate in this step. Also, it is a good idea to distribute automation evenly between blue and green boxes.



Step 3: For Each BF -- Current & Future use of Digital Technologies by Using 8 Dimensional Model

Each selected BF (Business Function) is automated by using the 8 Technology Dimensions. The 8 dimensions support the following objectives:

- Globalization (Boundaries Crossed): helps reaching out to customers and suppliers around the globe
- Smartness Dimension: AI & Machine learning can eliminate redundant tasks
- Web Usage -- semantic web can convert web content to “intelligent” content that accelerates transformation
- Mobility Usage is essential to support wireless business services
- Analytics is used to extract valuable insights from data through visualizations, predictions and optimizations
- Data Dimension: more data supports more insights and decisions through Analytics
- Outsourcing (cloud) Dimension: Cloud services support agile outsourcing
- Security Dimension -- Data privacy and security



Step4: For Each BF -- Benefits and Risks of Automation

There are benefits and risks for automating each selected BF (Business Function). Here are some general observations:

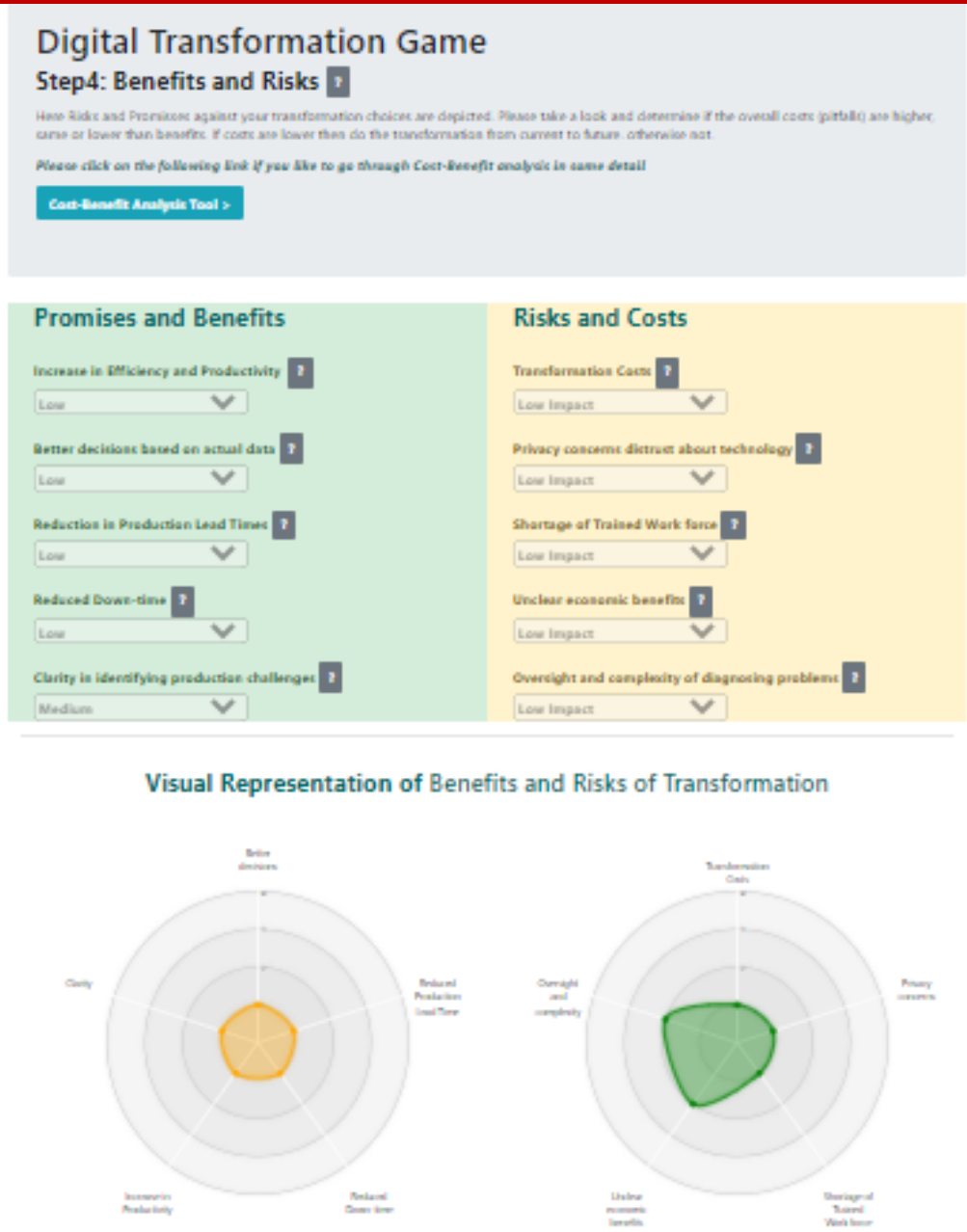
Promises & Benefits (Low, Medium, High)

- Increase in Efficiency and Productivity
- Better decisions based on actual data
- Reduction in Production Lead Times
- Reduced Down-time
- Clarity in identifying production challenges

Risks and Costs

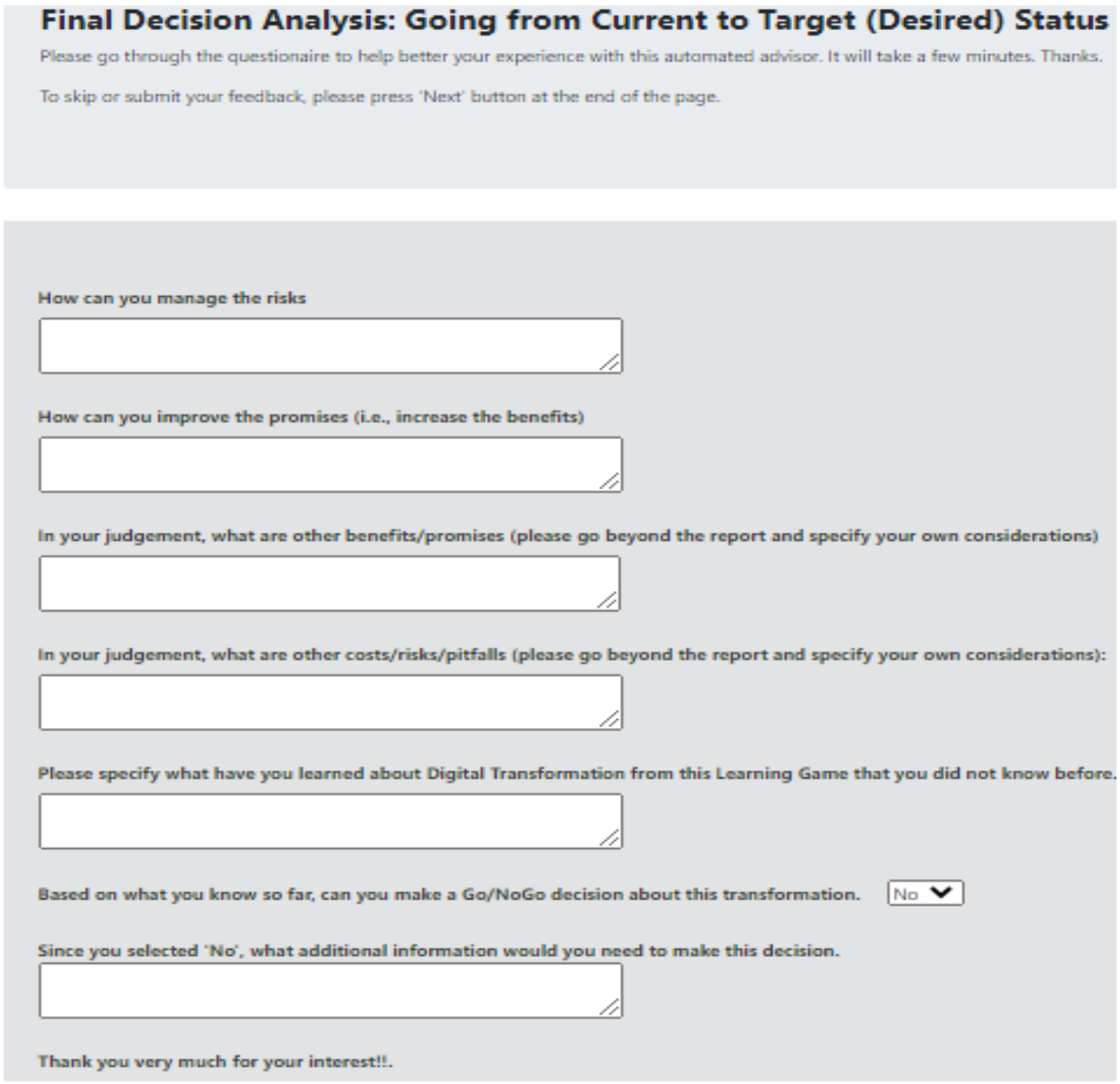
- Transformation Costs
- Privacy concerns distrust about technology
- Shortage of Trained Work force
- Unclear economic benefits
- Oversight and complexity of diagnosing problems

Note: This is an active area of work because benefits and risks can be general or specific to each BF . We have done general CB analysis but need more BF specific CB analysis. .



Final Decision Analysis: Going from Current to Target (Desired) Status

- How can you improve the promises (i.e., increase the benefits)
- In your judgement, what are other benefits/promises
- In your judgement, what are other costs/risks/pitfalls
- Please specify what have you learned about Digital Transformation from this Learning Game that you did not know before.
- Based on what you know so far, can you make a Go/NoGo decision about this transformation.
- If 'No', what additional information would you need to make this decision.



Quiz and Final Report

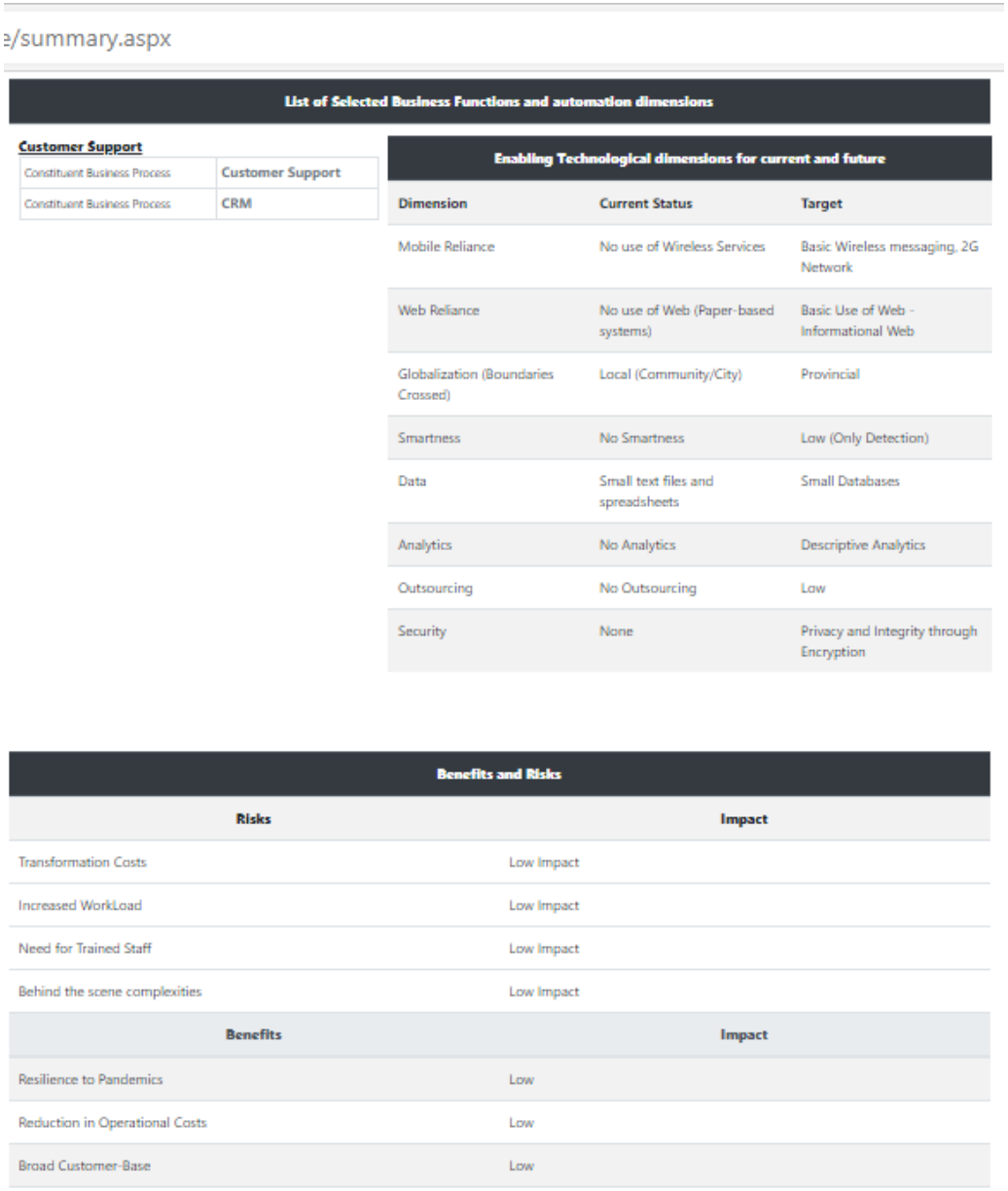
Assessment Quiz assures that the users have understood the concepts. Users can try the Quiz many times to improve learning.

The Digital Transformation Report gives a summary of the current and future target use of technologies provides synopsis of Benefits and Risks:

- Risks are presented in terms of Transformation Costs, Increased WorkLoad, Need for Trained Staff and Behind the scene complexities
- Benefits are shown in terms of Resilience to Pandemics, Reduction in Operational Costs, Broad Customer-Base, Increase in Efficiency and Productivity.

A more thorough benefits and risks reports will be produced in the future.

This final report concludes the Digital Transformation game.



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List of Selected Business Functions and automation dimensions

Customer Support

Constituent Business Process	Customer Support
Constituent Business Process	CRM

Enabling Technological dimensions for current and future

Dimension	Current Status	Target
Mobile Reliance	No use of Wireless Services	Basic Wireless messaging, 2G Network
Web Reliance	No use of Web (Paper-based systems)	Basic Use of Web - Informational Web
Globalization (Boundaries Crossed)	Local (Community/City)	Provincial
Smartness	No Smartness	Low (Only Detection)
Data	Small text files and spreadsheets	Small Databases
Analytics	No Analytics	Descriptive Analytics
Outsourcing	No Outsourcing	Low
Security	None	Privacy and Integrity through Encryption

Benefits and Risks

Risks	Impact
Transformation Costs	Low Impact
Increased WorkLoad	Low Impact
Need for Trained Staff	Low Impact
Behind the scene complexities	Low Impact
Benefits	**Impact**
Resilience to Pandemics	Low
Reduction in Operational Costs	Low
Broad Customer-Base	Low

Suggested Experiments for the Digital Transformation Advisor

From Simple to Complex

Experiment1: Select a country and sector of your choice and run through the entire game *without making any changes to the game (i.e., just use defaults).*

Main requirements:

- Transformation of core business functions from current to future stage (e.g., brick and mortar to web advertising)
- Please read the tutorials and explains carefully and score at least 80%. Then also read the final report carefully and note the lessons learned.

Experiment2: Select a developing country and sector of your choice and run through the entire game *by making any changes to the game as you need .*

Main requirements:

- Objective: Transformation of industry specific functions from current to future stage (e.g., stage2 to Stage3)
- Please read the tutorials and explains carefully and score at least 80%. Then also read the final report carefully and note the lessons learned.

Experiment3: Select a developed country (e.g., OECD) and a complex sector (e.g., Healthcare, Manufacturing) and push the limits of the game *by making any changes to the game as you need .*

Main requirements:

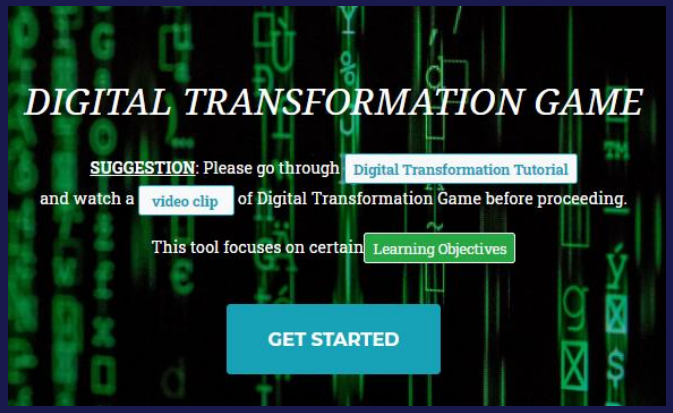
- Objective: Transformation of industry specific functions from current to future stage (e.g., stage3 and Stage4)
- Please read the tutorials and explains carefully and score at least 80%. Then also read the final report carefully and note the lessons learned.

Digital Transformation Advisor and Planner (DTAP)

From Strategic Analysis to Implementation of Strategies

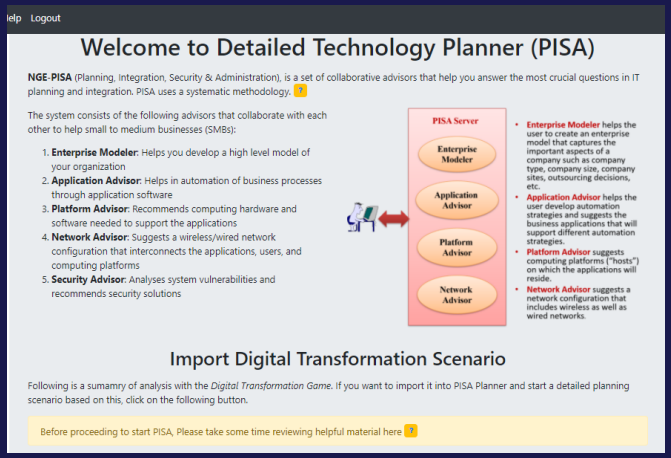
Crossing the Bridge

ANALYSIS



BRIDGE

IMPLEMENTATION



PISA (Planning, Integration, Security & Administration) Tool

Important: Please review the PISA Overview Document before proceeding and choose a 'Scenario' that will store all the answers

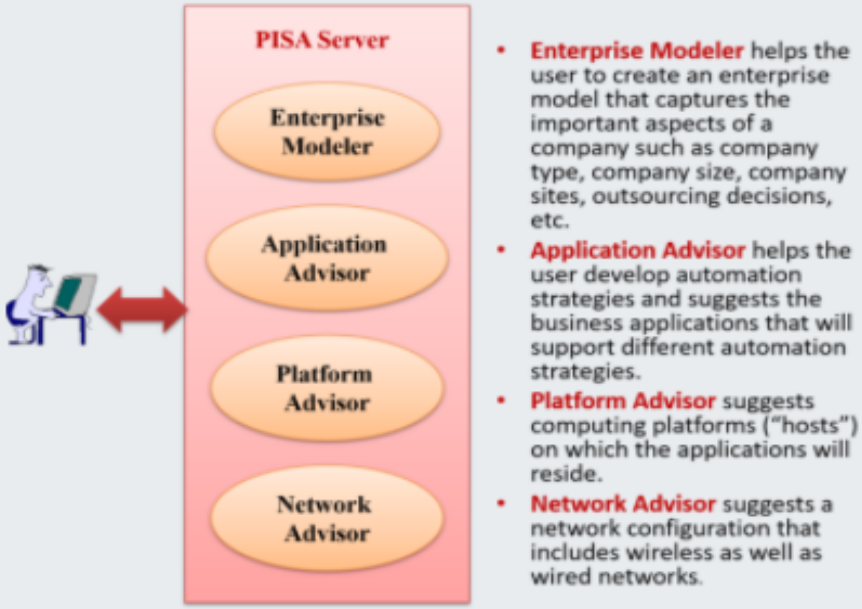
elp Logout

Welcome to Detailed Technology Planner (PISA)

NGE-PISA (Planning, Integration, Security & Administration), is a set of collaborative advisors that help you answer the most crucial questions in IT planning and integration. PISA uses a systematic methodology. ?

The system consists of the following advisors that collaborate with each other to help small to medium businesses (SMBs):

1. **Enterprise Modeler**: Helps you develop a high level model of your organization
2. **Application Advisor**: Helps in automation of business processes through application software
3. **Platform Advisor**: Recommends computing hardware and software needed to support the applications
4. **Network Advisor**: Suggests a wireless/wired network configuration that interconnects the applications, users, and computing platforms
5. **Security Advisor**: Analyses system vulnerabilities and recommends security solutions



- **Enterprise Modeler** helps the user to create an enterprise model that captures the important aspects of a company such as company type, company size, company sites, outsourcing decisions, etc.
- **Application Advisor** helps the user develop automation strategies and suggests the business applications that will support different automation strategies.
- **Platform Advisor** suggests computing platforms ("hosts") on which the applications will reside.
- **Network Advisor** suggests a network configuration that includes wireless as well as wired networks.

Import Digital Transformation Scenario

Following is a sumamry of analysis with the *Digital Transformation Game*. If you want to import it into PISA Planner and start a detailed planning scenario based on this, click on the following button.

Before proceeding to start PISA, Please take some time reviewing helpful material here ?

STARTING POINT: Build a Model of Your Enterprise

Suggestion: Please click on '?' for an explanation of each Step

Enterprise Business Modeler

Step 1 | Step 2 | Step 3 | Step 4

STEP 1: Company Profile Basic Data ?

Please enter scenario of your organization. The information entered here will be extremely important since the recommendations and decisions made by the 'Advisors' will be based on this data.

To learn more about different types of enterprise modeling scenarios, see Example scenario as a guide to your session

For help with business issues, click here for a concise **Guide to Small and Medium sized Businesses (SMBs)**

Secnario Import Detected: This Scenario is continuation of *Digital Transformation Analysis*. Some of the factors are derived from the previous analysis. These Include:

- Type of Industry Segment :***Retail and Wholesale***
- Site Locations:***Regional***
- Web Reliance:***Basic Websites***
- Mobile Computing and Wireless Reliance:***Wireless messaging and wireless web***

One of the aspects of the Digital Transformation Analysis was the current mode of operation and the target mode of operation. The derivation of factors is based on a ***weighted maximum value for the targeted mode of operation*** of the choices made for multiple Business Functions. You can change the values as you see fit. Changing any factor may effect smart selection of relevant

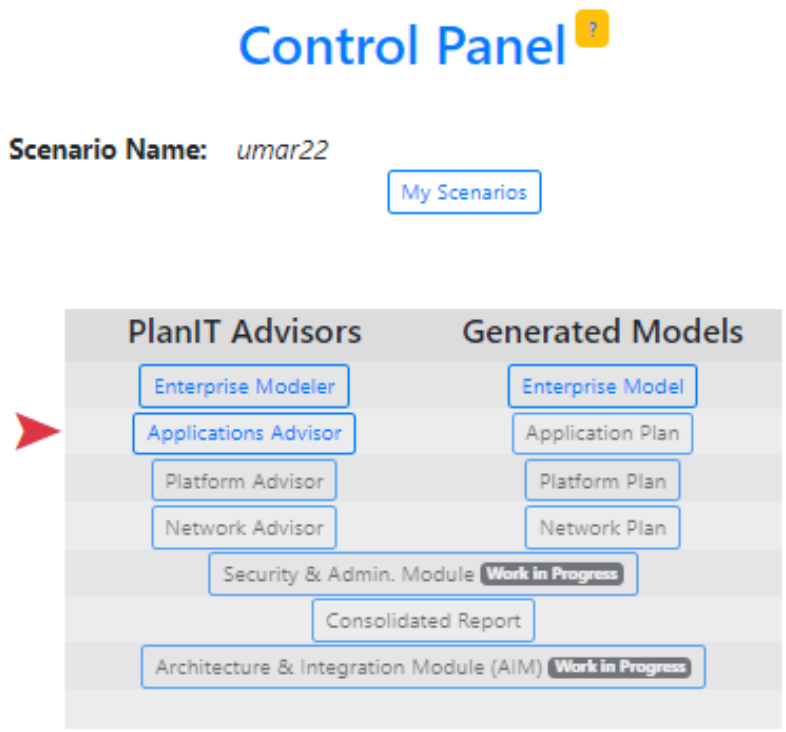
Glossary | Guides and Tutorials | Documents | Bussiness Scenarios | PISA Pie | Privacy Ploicy

The Control Panel

It shows how all the PISA Advisors (Application Advisor, Platform Advisor and Network Advisor) will be invoked after the Enterprise Modeler and where the Generated Models will be stored

Hints:

This is the main home page of PISA. It serves as a control panel and is shown several times as the interview progresses. **The Red Arrow** suggests a sequence in which the advisors should be invoked. **The Yellow Arrow**, if shown, indicates that AIM may be invoked at this point to investigate application integration issues and come back to the Red Arrow later. Although doable, it may get a little complicated to go back and forth between PlanIT and AIM. The suggested approach is to finish PlanIT first to develop an enterprise plan and then proceed with AIM to investigate architecture and integration issues.



Additional Hints:

PISA consists of a set of advisors that are subdivided into the following two modules:

PlanIT (Planning for IT) Module: These advisors are used to build a model of an enterprise and then develop the application, platform, network and security plans of the enterprise. PlanIT is the starting point.

AIM (Architecture and Integration Module): These advisors are used to explore enterprise applications, develop requirements for them and build/evaluate integrated architectures

Detailed Summary Report

This Report shows detailed results of all the PISA Advisors.

IMPORTANT: These results show how the Strategy Developed in DTA can be actually implemented

Detailed Summary Report

Executive Summary

You have worked through a complete session of the planning process. This report gives a summary of all the results produced so far:

- **The Enterprise Model** that shows your company information (company type, company size, number of sites, what business processes are performed on what sites, what are the workgroups and where do they reside)
- **The Application Plan** that shows what business processes will be automated, what strategies (rent, buy, outsource, re-use) are used to automate the business processes, and any COTS (commercial-off-the-shelf) packages selected.
- **The Computing Platform plan** that shows the computing hardware and software needed to support the application plan.
- **The Network Plan** that shows the wireless as well as wired network to support your staff (called Intranet), your customers and your business partners and suppliers.
- **The Security Plan** needed to protect your corporate assets (databases, programs, computers, network links, network devices).

The next steps are:

- Develop an RFQ (Request for Quotation) to solicit proposals from consulting companies and service providers who will implement the plan
- Select and hire a consultant to refine and implement the plan

This report can be used in all these steps. It is already in an RFQ format and can be used by the consultants to quickly understand what you are planning to do.
