Methodology and tools for matchmaking with digital solutions & solution providers for SMEs

User Guidelines

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SNV

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Background

Digitalisation is not an easy or straightforward process for agri-food SMEs in developing countries. It requires significant change or evolution from the SMEs, along with considerable time, planning, and resources. SMEs will need to make balanced decisions, choosing digital solutions that suit their requirements, to benefit from going digital. However, considering the vast number of digital solutions that exist in the market, added to the capacity and resource constraints that most SMEs have, selecting and adopting the right solution for an individual SME is not an easy process. To address this constraint, CORE-Africa has supported the development of a package of tools / approach for matchmaking between agri-food SMEs and digital solution providers.

The general objectives of the matchmaking process are:

1. Enable SMEs to better access digital opportunities for their functioning and business.
2. To do that in a way that fits their needs, priorities, and stage of (digital) development.
3. Have a realistic view on the way ahead (roadmap and risks) - including the costs and benefits.
4. Select relevant solutions and providers to help them with that.

CORE-Africa developed the methodology and tools specifically for supporting adoption of digital solutions among 11 agri SMEs under the Climate Resilient Agribusiness for Tomorrow (CRAFT) project – 5 in Tanzania and 6 in Kenya. However, the positive feedback we have received from SMEs and the CRAFT team, suggest that we have a basic package that can be taken-up by other projects and be further refined/improved as needed.

The package helps projects to realise the adoption of well selected digital solutions in realistic ways and to be further supported by relevant specialist solution providers. It is an essential tool/package for shaping up an effective digital component to a project. With the package projects can also decide that they hire more specialist expertise to apply it and do the matchmaking process in a solid enough way.

Methodology

The matchmaking process between SMEs and digital solutions/solution providers can be carried out in the steps listed below. The CORE experience in using this methodology is also provided along with the steps to provide projects an overview of how they can use this methodology within other projects.

1. **Profiling:** The first step in the matchmaking process starts with undertaking a basic profiling of the SME and its environment. This helps to verify the interest of the SME in undergoing the digitalisation process and if they have management buy-in for the same. For instance, in the case of CRAFT project, the CRAFT project team undertook a quick analysis of the SMEs they were supporting and gathered their interest in going digital. This initial shortlist helped the CORE project to work with SMEs that are interested in going through digitalisation process and brought in time efficiencies for the CORE team.

2. **Need and maturity assessment:** SMEs will need to review their business processes, practices, workflows, and procedures, and understand their digital needs as well as digital maturity levels. This step is important to understand the level at which the SME is at in their digitalisation process, which business operations have an urgent need for digitalisation, and for optimal utilisation of resources for digitalisation. CORE developed tools for undertaking the digital needs and maturity assessments based on desk research and experience of the team. These tools were administered during the interviews the team had with the SMEs and the tools were modified based on feedback from the interviewees and CRAFT team. The tools are provided as in the next section.

3. **Prioritising needs and design customised digitalisation plans:** After undertaking a needs assessment that covers various business operations within the SME, the next step would be to prioritise the digital needs of the SMEs and design customised digital strategies, plans, and roadmaps to invest in. For instance, in the CRAFT SME needs assessment, CORE team used the inputs to score and prioritise the needs within the SMEs. This was circulated as reports to the SMEs and verified if they agreed with the prioritisation. This feedback help to finalise the prioritisation and provide customised feedback and digitalisation plans for the SMEs.

4. **Creating linkages:** Once a digitalisation plan is created for the SME, the next step is to link the SMEs to digital solution providers who can implement the solutions. The SMEs need to be provided support in linking with the available solution providers in a systematic manner. In most cases, there would be many digital solution providers providing similar solutions. In such cases, projects can support the SMEs in providing selection criteria to shortlist and choose the most relevant solution for the SME. The selection criteria can cover a risk and cost-benefit analysis. Further, the projects can support in discussions between the digital solution providers and SMEs and organise workshops for matchmaking where needed.

5. For instance, **during the needs assessment of CRAFT SMEs**, we found that some of the SMEs needed enterprise-wide solutions to give them a complete overview of their business operations. In this case, CORE created an ERP solution selection tool, covering all the features that the companies listed that they would need. This is also provided as an Annex to this document.

6. **Handover:** The final step in this matchmaking process after creating the necessary linkages would be to handover the customised roadmap/plan to the SMEs to carry forward the digitalisation process. This is due to the fact that the rest of the activities such as actual budget allocation and implementation is

internal to the SME. It is better to let the main decision rest with the SME, to ensure continuous buy-in from their internal teams, without interference from our projects. However, projects can still support the SMEs in identifying and training people or provide backstopping support during implementation of the digital solutions.

General suggestions

It is important to note that going through the initial matchmaking process could take anywhere between a month to 3 months, depending on the scheduling and planning arrangements made by the project. Projects need to factor in the internal decision-making processes within SMEs, that could also cause considerable delays in undertaking such assessments.

It is usually a good practice to have at least two team members from the projects to be involved in this process. This helps to bring different perspectives and avoid any bias that the project team can bring to the process.

Tools

SME Digital Maturity Test

This tool helps SMEs to understand the digital maturity of the different processes within their company and provide an overall picture of the digital maturity of the SME itself.

Tool

Scale 1 to 5: 1. Don't know / not applicable; 2. N0; 3. Rather not; 4. Rather yes; 5. Yes/Definitely

1. Digital transformation and competition	
a. Do you find your company above industrial average when it comes to digitalisation? b. Are you confident that the digital solutions and equipment implemented in your company are the most effective for you? c. Are you confident that the digital solutions and equipment implemented in your company are the most effective for you? d. Do you have a detailed plan regarding which digital solutions and/or improvements you will implement during the coming year? e. Do you have a vision regarding what digital solutions/enhancements you want to implement in your company within 3-5 years?	
2. Financial data management	
a. Can you retrieve, store and review your company's most important financial data at any time without involving accounting? b. Do you have the appropriate software for bookkeeping in your company? c. When sending/receiving invoices, can you quickly and easily obtain billing information, reply from the payee, payment status?	

3. Human resources environment

a. Do your employees go digital? Does your company use tools to streamline communication and processes on the company-employee line?
b. Can you calculate salaries and pay staff through digital systems?

4. Customer relationship management and communication

a. Can you find the history of each customer's purchase pattern quickly and easily in a digital way?
b. Can you easily select customers by specific parameters in the customer database?
c. In the event of changes, are your customer data (such as name, reg., address, etc.) automatically updated in your information systems?
d. Do you use and analyze customer historical data to forecast purchase volumes/discounts/buying habits?
e. Do you undertake digital marketing and sales?
f. Will your potential customers/employees find the information about you on the Internet by entering keywords in search engines?
g. Can you provide the customer with online support when they need it?
h. Can you reach a large number of customers (employees/partners) online?

5. Resource management

a. Can you quickly and easily access data about the asset management (raw materials, inventory, finances, etc.) for your company based on information derived from your digital systems?
b. Does your tracking system allow for electronic document exchange with partners (invoices, orders, etc.)?
c. Can you quickly and easily access data about the asset management (raw materials, inventory, finances, etc.) for your company based on information derived from your digital systems?
d. Does your tracking system allow for electronic document exchange with partners (invoices, orders, etc.)?
e. Can you immediately calculate the cost of goods/services etc.?
f. Can you immediately calculate the cost of goods/services etc.?

6. Digitalisation of process	
a. Have you automated/digitalised your company to the fullest potential? If different digital solutions have been implemented within the company, are they interconnected and easy to use? b. Have you automated/digitalised your company to the fullest potential? If different digital solutions have been implemented within the company, are they interconnected and easy to use?	
7. Security policy and practices	
a. Are you confident that if you lose access to your company data, you will be able to restore it quickly? b. Do employees in your company receive regular education and do they take proper action regarding data security and safety topics? Do you use secure connections when sending/storing documents/ business data? c. Are you confident that if you lose access to your company data, you will be able to restore it quickly? d. Do employees in your company receive regular education and do they take proper action regarding data security and safety topics? e. Do you use secure connections when sending/storing documents/ business data?	
8. Digitalisation in production	
a. Is your production process automated/digitalised? Can your management track production processes in real time (eg., production flow, alerts, etc.)? b. Do you use your production data to build models (Big Data) for better management or predictive maintenance? Is your production process automated/digitalised? Can your management track production processes in real time (eg., production flow, alerts, etc.)? c. Do you use your production data to build models (Big Data) for better management or predictive maintenance?	
9. Innovation and growth perspectives	
a. Do you feel familiar with the most important trends and updates of digital solutions for your company? Are you considering/planning to implement digital solutions within your company during the next 2-3 years? b. Do you feel familiar with the most important trends and updates of digital solutions for your company? Are you considering/planning to implement digital solutions within your company during the next 2-3 years?	

10.Resource management	
a. Can you quickly and easily access data about the asset management (raw materials, inventory, finances, etc.) for your company based on information derived from your digital systems? b. Does your tracking system allow for electronic document exchange with partners (invoices, orders, etc.)? Can you immediately calculate the cost of goods/services etc.? c. Can you quickly and easily access data about the asset management (raw materials, inventory, finances, etc.) for your company based on information derived from your digital systems? d. Does your tracking system allow for electronic document exchange with partners (invoices, orders, etc.)? Can you immediately calculate the cost of goods/services etc.?	

Administering the tool
- The digital maturity tool can be sent to the SME and their management can fill out the tool themselves.
- Alternatively, the project team can help administer the tool and fill out either with the scale of 1 to 5 provided, or with a simple yes or no response.

Time required
- From experience, since most SMEs did not have many processes that are digital yet. Therefore, the project team required very little time on filling this tool – less than 10 minutes in most cases.

Output
- The tool can help companies understand the digital maturity level at which the SME is at, and also get an understanding of what possibilities exist for the companies for digitalising their various operations.
- A report on digital maturity level if required. However, this is best combined with the digital needs assessment, since they go hand-in-hand.

SME Digital Needs Assessment

This tool helps the SMEs to identify the different business processes and operations within the company that could be digitalised. Further, the tool can be used to prioritise the needs by scoring the need on a scale of 1 to 5, with 1 being least priority and 5 being high priority.

Tool

Company Information	Please fill in
1. Business name 2. Contact person 3. Physical address 4. Telephone and e-mail address	
Details of the business	
1. Business type (Sole proprietor / LLP etc.) 2. Main business activity 3. Target Clients 4. Number of employees 5. Turnover per year (in USD)	
End-Customer relationships and distribution	
1. Is enhanced customer relationships critical for your business? On scale 1 to 5, indicate the level of urgency to be addressed – with 1 being least urgent and 5 being most urgent. 2. Are there issues in onboarding new customers or in maintaining relationships with existing customers? 3. Have you explored digital solutions for expanding your sales and marketing activities? If yes, please elaborate. 4. Have you ever used e-commerce sites for reaching out to your customers? 5. Do you use digital solutions for distributing your products?	

Farmer recruitment and capacity building

1. Is data/information of your supplying farmers and capacity building of farmers critical for your business? *On scale 1 to 5 indicate the level of urgency to be addressed.*
2. Do you document and profile farmers you work with? And, what do you use the profiles for?
3. If yes, do you keep physical records on paper or do you use a digital system?
4. Do you provide extension support to your farmers? And, do you have any issues in providing such support?
5. Have you used any digital solutions for providing extension support? If yes, which ones did you use, and what was your experience in using them?
6. Do you send SMS alerts on crop pests, weather etc. to your farmers? If yes, what solution do you use, and elaborate on any issues you have faced using this.

Input provision

1. Is input provision to your supplying farmers critical for your business? *On scale 1 to 5 indicate a level of urgency to be addressed.*
2. Do you provide inputs for your farmers – such as seeds, fertilisers etc.? If yes, how you track the supply of inputs and payments?
3. Do you have a digital procurement system for procuring inputs from targeted suppliers? If yes, please elaborate on the systems used and your experience with such systems.
4. Do you use mobile or SMS alerts for stock taking – both for farmers and input suppliers? Any issues?

Procurement, Processing, Logistics and Management

1. Is Procurement, Processing, Logistics and Management critical for your business? *On scale 1 to 5 indicate the level of urgency that this needs to be addressed.*
2. Do you trace to the farms/farmers or procurement agents?
3. Do you geo-tag them and do you face any issues in doing so?
4. Do you set quality standards for procuring the crops?
5. If yes, is it a digital or manual system? Any issues in undertaking such a process?
6. How do you do the planning and scheduling of procurement, what are the issues?
7. Do you have a scheduling software or any digital solution to enable planning and scheduling of procurement? If yes, please elaborate. Issues?
8. Do you send SMS or mobile alerts to farmers about procurement schedules? If yes, is the system automated? Issues?
9. How do you manage your plant operations and what are the issues?
10. Do you use digital solutions for plant operations, process scheduling etc.? If yes, please elaborate.
11. How do you manage your logistics and what are the issues you face?
12. Do you have an automated system for transporting the goods using logistics management software or other digital solutions? Issues?

HR, Payments, and other Financial Services	
1. Is payment and financial services critical for your business? On a scale 1 to 5 indicate the level of urgency that this needs to be addressed. 2. Do you provide input loans, crop advances or other credit for farmers? 3. If yes, do you have an automated system for loan provision – linked to your farmer records? Any issues? 4. How do you pay your farmers? Please elaborate on the systems you use for this. 5. Do you used financial management systems (for instance - automatic invoice generation for your clients/customers) 6. Do you have a payroll processing system? Do you use any Human Resource Management solutions?	

Knowledge on digital solutions	
1. In what way do you think digital solutions can strengthen your business? 2. Have you come across other digital solutions that can improve the critical operations of your company? Please elaborate. 3. What challenges did you face in procuring the solutions? Please elaborate. 4. What are your internal capacities to manage the existing digital systems and what are the issues? (Look into staff capacities as well as capacity / willingness to invest in digital solutions) *How can you use your data better?	

Administering the tool:
- The digital needs assessment tool needs to be administered in a meeting between the project team and the SME managers who are involved in the business operations.
- The meeting can be done either online or in person.

Time required:
- From experience, administering this tool takes about one hour on average. Even in cases where the SME did not use a lot of digital solutions already, the tool triggered discussions around the possibilities for digitalisation.

Output:
- The tool can help companies understand the digital needs within the organisation and also help prioritise their digital needs, allowing the SMEs to better plan and allocate resources towards the digitalisation process.
- A report on the outcome of the process needs to be shared with the SME, also providing customised feedback and action plan where possible.

Solution Comparison and Selection Matrix

This tool helps the SMEs that require enterprise-wide digital solutions to select the ERP solution providers. The tool lists out the features that the different ERP solutions provide, and helps the company shortlist the most viable solution that suits their business needs. While this tool was focused on features of ERP solutions, the project teams can adjust this tool for comparing or selecting other digital solutions.

Tool

Details	Solution 1	Solution 2
Provider		
Commercial maturity/turnover		
Years in operation		
Main clients similar to SME		
Registration history in EA		
Partnerships/coordination with other providers to make eventually bundling possible		
Specifications		
Supported Business Type (SMEs, MSMEs, Large businesses)		
Deployment (cloud based, on-premise or both)		
Language support		
Pricing		
Subscription (plans)		
Free trial		
Training and maintenance support		
Regular updates		
Separate module's independency		
Compatible platforms (Mac, Windows, Android, iOS)		

Features		
General		
Data import/export		
API Integration (interoperability)		
Dashboard / business intelligence facility covering own modules and others (solutions and databases)		
Messaging and emailing capabilities		
Finance and Accounts		
Invoice management		
Accounts receivables		
Payment processing		
Vendors, customers and debtors accounts		
Stocks recording		
Analytics, reporting and links to dashboard		
Customer Relationship Management (CRM)		
Customer database		
Contact management		
Order management		
Scheduling		
Sales forecasting and analytics		
Marketing management (social media and others)		
Reports and (links to) dashboards		
Customer invoicing		

Supplier/Farmer Management System		
Farmer database		
Other supplier database		
Debtor/credit (inputs)		
Services (extension, inputs, finance)		
Contact and communication management		
Order histories		
Scheduling		
Payment processing		
Report, analytics and links to dashboard		
HR Management Solutions		
Employee database		
Recruitment		
Employee time management		
Performance reviews		
Payroll		
Operations (Distribution, Logistcs, Warehousing etc.)		
Stock management		
Scheduling		
Reports, analytics and links to dashboard		

Administering the tool
- The tool has been used in interviews with ERP solution providers active in Kenya and Tanzania.
- The meeting can be done either online or in person.
- The tool can either be used directly by the SME or can be facilitated by the project team.

Time required
- From experience, administering this tool takes about one hour on average.

Output
- The tool can help SMEs to identify the most relevant solution that can be deployed within their company.

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About us

The COVID-19 Response and Resilience Initiative for Food Value Chains (CORE) ran from July 2020-December 2022. Initiated by the Netherlands Ministry of Foreign Affairs and led by SNV, it was set up by to strengthen responses to the COVID-19 pandemic across eight major SNV-implemented agriculture projects in Africa: BRIDGE, CRAFT, HortInvest, Horti-LIFE, TIDE, MODHEM+, PADANE and STAMP+.

Based on field-level demand, CORE selected four themes that capture key structural challenges highlighted by the pandemic across agri-food systems: farmer inputs and services; consumer-oriented strategies; environmental hygiene integration; and digitalisation for agriculture (D4Ag). Each theme contributes to the structural resilience of food value chains and agri-food systems to shocks and stresses.

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