



# Process mapping for microinsurance operations

**A toolkit for understanding and improving  
business processes and client value**





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## **A toolkit for understanding and improving business processes and client value**

by

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Provided as part of the IFAD project Facilitating Widespread Access to Microinsurance Services, managed by the Microfinance Centre and implemented by the Microinsurance Centre, LLC.



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ISBN 9789290723325

October 2012

Cover Photo: ©IFAD/Asad Zaidi

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# Foreword

This manual is intended as an aid to microinsurance institutions. It presents a technique called 'process mapping' that can support institutions in self-analysis by assisting them in understanding, developing and improving business processes. Although the concepts presented may be used for many types of projects and processes, this manual was specifically developed as a supplement to *Microinsurance product development for microfinance providers (McCord 2012)*.

The manual describes how a process map can be drawn, analysed and adapted for the microinsurance sector. It offers practical guidance about which processes to concentrate on, and guides the reader through the task of improving these processes, first on paper and then in practice.

In order to make process-mapping concepts more 'real', this manual uses a fictitious case study of medical claims processing to walk the reader through the steps of creating a process map. It is hoped that using this study will illuminate the advantages of using process mapping and highlight the important rules of thumb. Although creating process maps is not especially difficult, it is important to keep in mind how to create them and how they can be used to best advantage.

The manual does not provide benchmarks on optimal microinsurance processes. It concentrates rather on operational aspects. Once process mapping is widely applied in the microinsurance industry, it will open the way for the development of benchmarks. The author welcomes feedback, and the reader is encouraged to share process maps that are developed as a result of this manual. Submissions will be treated as confidential, and permission will be requested before any use. If submissions are used or published in any way, they will be anonymous.

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# 1. Overview



# 1. Overview

## Introduction

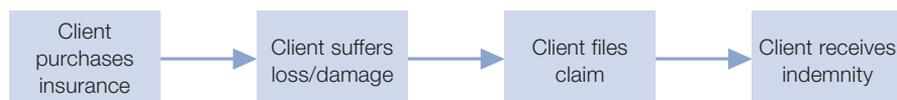
Process mapping is a simple and valuable tool for improving and streamlining existing business processes or designing and communicating new ones. It uses charts with symbols and arrows to visualize an organization's core processes and their attributes, such as sequence, duration, costs, risks and responsibilities. Process maps can illustrate more clearly than written procedures how a business is conducted, where value is added to a product or service, and where inefficiencies might be occurring. Although the process-mapping technique originated in industrial operations, it has many benefits for streamlining any business, including those in the insurance sector.

Frank and Lillian Gilbreth developed the first structured approach to visualizing processes in 1921 with *Process charts: First steps in finding the one best way to do work* – mainly to optimize industrial engineering processes (Gilbreth and Gilbreth 1921). Since then, many different process-mapping methods have been developed, with a variety of approaches, techniques and symbols. Today, the Gilbreths' simple system is used in a variety of industries to better understand and improve operations.

## What is a process map?

A process map<sup>1</sup> is a graphic representation of the tasks and procedures (the processes) followed in the course of doing business (figure 1). A process is defined as any action that has an input at its starting point and an output at its end. Processes consist of a sequence of single interrelated steps or tasks. They are described by an active verb and a noun, for example 'file claims form' or 'sign receipt'.

<sup>1</sup> Until now, no universally accepted terminology for this approach has emerged. Another frequently used term is 'flow charting'. While the terms can be used as synonyms, in this manual the activity is called 'process mapping' and the product a 'process map'.

**Figure 1. Example of a process overview**

An accurate process map presents a clear picture of what happens in a process, but it is much more than a record of the sequence of process steps. It can answer important questions about the business, such as:

**For the whole process:**

- Where does the process start and where does it end?
- What are the inputs and outputs of the process?
- What are the individual steps involved in the process?
- Who executes which step?

**For each process step:**

- What happens in this step?
- Where does it fit into the sequence of process steps?
- Who carries it out and who (which position or department) is responsible for it?
- What are the inputs and outputs of each step?
- How long does it take?
- How much does it cost?

A process map can be a high-level map that shows only the broad outline of steps (as in figure 1) or it can be a very detailed diagram. For example, the third step in figure 1 is 'Client files claim'; this step might easily be made into several more detailed steps, such as 'Client obtains claims form', 'Client fills out form' and 'Client sends form to insurer'. The level of detail used in a process map typically depends on the purpose of the map.

## Why process mapping?

The nineteenth-century Russian writer Turgenev wrote: "A picture shows me at a glance what it takes dozens of pages of a book to expound." In the same way, a process map enables people to visualize complex sequences of activities and tasks. And beyond simple visualization, a process map facilitates the careful analysis needed to streamline and improve a process.

### Why process mapping?

- To document how business is (or should be) done
- To understand and simplify a process
- To understand and minimize cost and time factors
- To understand and mitigate risks
- To understand and clarify responsibilities
- For training and/or communication (internal and external)
- To improve customer satisfaction
- To plan and introduce new processes

A process map can help an organization institutionalize the knowledge of how its business is done. This is especially important for businesses where staff turnover is high and/or only a few employees are knowledgeable about a given process.

## 2. Process mapping



## 2. Process mapping

### The mapping cycle: 'as-is' and 'should-be' maps

To reap its full benefits, process mapping should be an evolving process rather than a one-off task. Typically, the starting point is to draw a map that mirrors what is currently being done, and the end point is a map of an optimized process. This theoretical optimal process then has to be tested, and only when it actually works on the ground can the map be adjusted and the mapping process considered finished. But even this end point is temporary, as the cycle of actual and optimized processes must begin again in an iterative practice of continuous improvement.

We distinguish two different types of maps, each in a certain phase in the mapping cycle:

- *As-is map*: depicting the way business is currently being done, which serves as the basis for analysis and optimization;
- *Should-be map*: this depicts the plan for an improved way of doing business.

Ideally, process mapping is embedded in a comprehensive quality-management strategy. Alternatively, it can be implemented by the institution's internal audit department. A fall-back solution is to put it under the department responsible for operations. However, bear in mind that 'operations' may not be the best department to recognize the need for fundamental change – as it is, after all, the department responsible for the existing set-up.

### 'As-is' maps

The *as-is map* mirrors what is currently happening in the organization. It is generated by interviewing the people involved and getting them to explain exactly what they do, how they do it and why. The resulting map should highlight (rather than gloss over) any inefficiencies or process steps that are not clearly defined.

## ‘Should-be’ maps

After drawing your *as-is map*, it will probably become clear that certain steps in the business process need to change. After a thorough analysis, you will then draw a *should-be process map*, which will depict the optimal version of your business processes. This map is thus a proposal of how the existing processes might be improved. *Should-be maps* are also created whenever you want to introduce a new process.

Eventually, the *should-be map* has to be tested in reality. As it is a theoretical construct, one cannot expect reality to work exactly as planned. Thus, after a certain trial period, the *as-is* and *should-be maps* must be compared and the differences between them assessed. It could be that aspects of the *should-be map* have not been implemented because the change would be unacceptable; for example, people may prefer to continue doing things the way they always have been done. On the other hand, some *should-be map* ideas may not have been implemented because they were impracticable. In this case, the *should-be map* has to be adapted to what is realistic and doable on the ground.

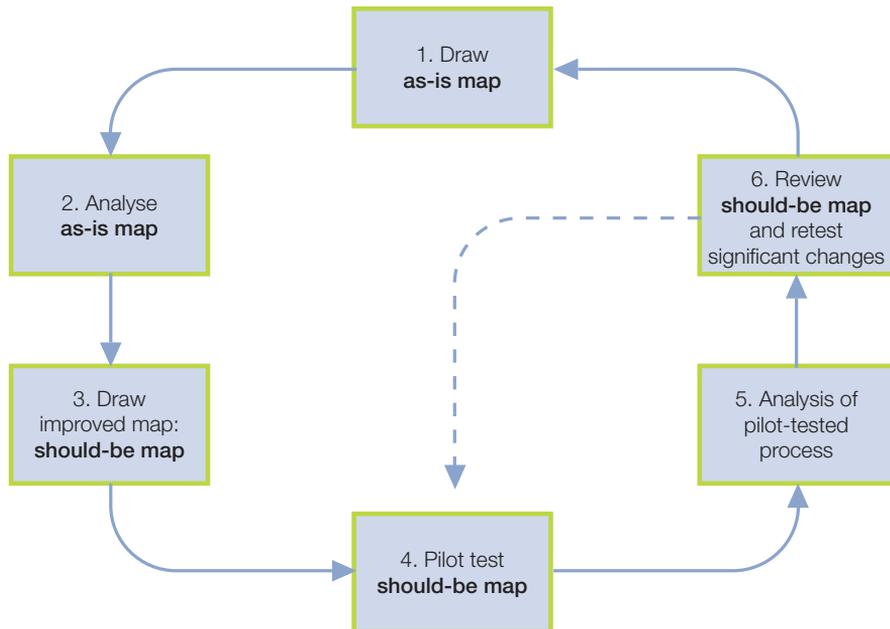
The resulting *revised should-be map* then becomes the document of reference according to which future processes are carried out. There will still be a need for internal audits or other checks to identify disjunctions between the *should-be map* and reality. Adaptation will then be necessary once more, whether on the side of the process or of the map.

### The six steps of process mapping and improvement

- Step 1** Draw the *as-is* situation. The *as-is map* shows how business is done in reality and is the basis for subsequent analysis.
- Step 2** Analyse the *as-is map* to find room for improvement (e.g. reduced turnaround time, costs, better risk management).
- Step 3** Draw the *should-be map*, showing the proposed improvements.
- Step 4** Pilot test any major change in processes to avoid surprises on a large scale.
- Step 5** Carefully analyse the results of the pilot test.
- Step 6:** If pilot test results are satisfactory, or if only minor changes are required, implement the new process throughout the whole organization. If major problems are detected, then go back to step 4 and test an improved process again.

*Note:* in cases where a completely new process is being mapped (for example, for a new product or delivery channel), one would start directly with step 3.

**Figure 2. The mapping and process improvement cycle**



## Approaches and styles

### The basics

There are many ways to visualize processes. To get the best results, the style of the map must be adapted for the particular industry and to the level of detail needed. In principle, there is no right or wrong method, as long as the methodology is consistent and serves the intended purpose. However, the following basic principles have proved helpful:

- Use simple symbols that are easy to understand. In theory, you can use any symbols you like, but the symbols presented in this manual are widely used and understood and will therefore facilitate communication with your peers.
- The flow of the process should be presented from left to right and/or top to bottom.
- Arrows should not intersect.
- Each symbol should be named concisely.
- It should be clear from the title whether the process is an *as-is map* depicting what really happens, or a *should-be map* representing the ideal process.

## Components of a process map

The process maps described in this manual are drawn so as to clearly identify who is responsible for each process step, how long it takes and how much it costs.<sup>2</sup> On the horizontal axis, relevant departments and functions are each given their own column (in figure 3, for example, these are: 'Customer', 'Insurance agent at branch' and 'Accountant at branch'). This makes it very clear who carries out or is responsible for each step in the process.

On the vertical axis, a time axis tracks the turnaround time, and a second column is provided to add the costs of each process step.<sup>3</sup> These columns are headed by symbols: time is symbolized by a clock and costs by a dollar sign.

The following steps are necessary to create a process map:

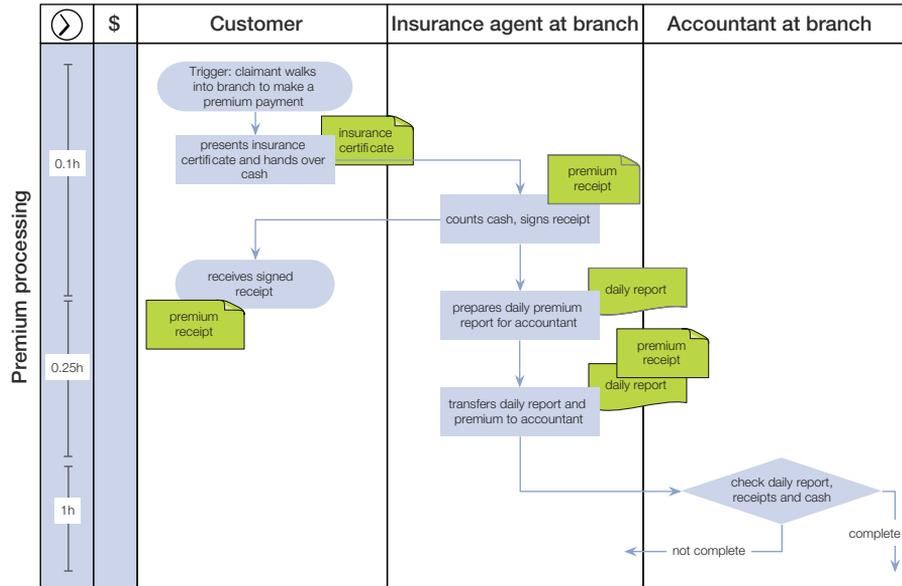
### Drawing the process map

- 1 Define the starting point (trigger) and the end of the process.
- 2 Use the name of the process title for the rows (in figure 3, this is 'Premium processing', while in figure 4 it is 'Claims processing').
- 3 List all functions or departments having a role in the process. Whether you choose to list individuals or whole departments depends on the level of detail you want to show. You might have to experiment to arrive at the desired level of detail.
- 4 Allocate a separate vertical column to each function or department (as in figure 3: 'Customer', 'Insurance agent at branch' and 'Accountant at branch').
- 5 If required, add time and cost columns (as shown in figure 3).
- 6 Place the various process steps in the columns of the relevant department or individual carrying them out.
- 7 Arrange the process steps chronologically so that they move vertically along the time line.
- 8 Connect the symbols with arrows showing the flow direction of inputs.
- 9 Adjust the level of detail and change symbols if necessary.

<sup>2</sup> Process maps of this type are sometimes referred to as 'cross-functional flow charts' or 'swim-lane flow charts'.

<sup>3</sup> A good understanding of how long a process takes, on average, is critically important, both for use as a baseline and for measuring improvements. Adding the costs is very useful, but may require significant effort to estimate. Ideally, this would be done in the framework of a broader cost-analysis exercise.

Figure 3. Detail of sample process map



## Symbols

There is no universal convention on which symbols to use. All that is required is that they are easy to understand and identify and that all staff in the organization use them consistently. The symbols in this manual are those commonly used (figure 4).

**Figure 4. Commonly-used symbols**

Symbol	Meaning
	<b>Start or trigger / end of process:</b> indicates which event triggers the process and which step ends the process.
	<b>Process step:</b> the most frequently used symbol in flow charts, this describes any process step or task to be performed. Keep the wording concise, describing the action as accurately as possible, typically using an action verb and an object. For example, 'file papers'.
	<b>Decision:</b> decision symbols always branch into two arrows, showing yes/no outcomes. Use this symbol for each act of checking or decision-making, for example: 'send back or forward?', 'ask for more documents?', 'is it complete?'
	<b>Document (hard copy):</b> any document (hard copy) used in a process step: such as forms, policies and reports.
	<b>Document (digital):</b> any document (digital version) used in a process step: such as client record in the management information system (MIS) or e-mails.
	<b>Database digital data storage:</b> data storage for digital data: such as MIS and accounting software.
	<b>Folder hard-copy files:</b> data storage for hard copies such as folders.
	<b>Process defined elsewhere:</b> this symbol indicates a subprocess that is not depicted in detail in the given process map, but that can be found in another one. It is used when there is more than just one step, for example checking claims validity in the Claims Department.
	<b>Direction arrow:</b> indicates the direction of the process.

## Tools and software

There are many software applications for drawing process maps and they each have their advantages and disadvantages. Choosing the right one depends mainly on how familiar you already are with one product. It also depends on how often you will use it afterwards – buying and learning how to use new software just to create one process map is not very efficient.

Widely used software applications that can be used to recreate drawings like those depicted in this manual include *OmniGraffle*, *Visio* and *SmartDraw*. Each of these tools allows you to create maps that look professional. If you have just started exploring process mapping and are unlikely to use it often, then *Microsoft Excel* (yes, *Excel!*) is sufficient to start with (*Microsoft Word* and *PowerPoint* can also be used, but *Excel* is by far the best tool for this).

Process maps can also be drawn on paper, or on a whiteboard, or laid out on a table using cards, or created with sticky notes. Using cards or sticky notes has the advantage of great flexibility and visibility to a team. You may find this method very helpful at the start, especially if you are extracting information from a group of people. Once the group agrees on the map, you can transfer the information to a digital or a properly drawn hard-copy form.

## Required resources

Mapping an existing process can take a couple of days or as long as two weeks – it depends how many people and departments are involved. Another factor is whether the processes are already well documented, whether documents and cases are already being tracked and processing times are known. If this documentation has not been done, you will first need to gather the information through interviews and workshops in representative branches. Documenting the current way of doing business and creating the *as-is map* are only the first steps – the basis for subsequent analysis and improvements. Each change should be carefully discussed with the parties involved and pilot tested.

The technique of process mapping is easy to learn. However, in some cases it may prove more efficient, or even critically necessary, to engage an outside person to do the first mapping and analysis – for example where human resources are limited, or where an unbiased perspective, fresh ideas or on-the-job training is needed.

### 3. The six steps in creating a process map



## 3. The six steps in creating a process map

This section discusses the steps required to create an effective process map. It uses a fictitious case study of a medical claims process to illuminate the important areas.

The six steps are:

- 1 Clarify the purpose
- 2 Create the business case
- 3 Assemble the team
- 4 Outline the process and gather data
- 5 Draw a detailed map
- 6 Finalize the map

### **Box 1**

#### **General information – case study: YES Hospital Cash**

The reputable insurance company Your Everlasting Security (YES) has developed a medical cash insurance product in close collaboration with the dynamic microfinance institution (MFI) Bright Future Credit (BFC). The product, to be offered exclusively to BFC clients, includes the following main features:

- Voluntary insurance
- Subscription: at loan application
- Premium payment: with monthly loan instalments
- Coverage: US\$5 per night at a public hospital
- Trigger: overnight stay at hospital
- Claims documentation required: hospital discharge certificate, signed by treating doctor

After collecting feedback from clients through six focus group discussions, YES finalized the product and BFC began offering the product at all its branches. BFC serves 54,000 clients through 23 branches, covering all provinces of the country.

Note: Unfortunately, BFC did not follow best practice in product development: it did no pilot test in a limited number of branches and thus there was no client feedback that could be used to refine the product.

## Step 1: Clarify the purpose

The first step is always to clarify the purpose(s) of the project, because the purpose defines how the mapping is to be done. The purpose also helps define the level of detail a process map should show. An overview map for an annual business report will certainly be less detailed than a map used to familiarize new employees with their tasks.

Finding the appropriate level of detail is not always easy. Drawing maps for all processes of an organization is very time consuming, so it is important to be clear about which part(s) of the business you want to include and the level of detail you want.

### What purpose?

There are a number of possible purposes for making a process map. The most common ones are to understand a process, to analyse and improve a process, to train people and to design new processes.

- *Process mapping to understand a process.* To analyse and improve a process, it is valuable first to gain a clear understanding of how the details of the business are carried out. Business processes can be complex. Often processes have evolved 'organically' to the point where not even management understands the detail. Sometimes one finds that the whole process has never been analysed. Careful analysis will show which processes should be mapped: where does performance lag behind customer expectations, benchmarks or competitiveness?
- *Process mapping to analyse and improve a process.* We do this when we want to identify bottlenecks or risks (related to fraud, security or reputation). Shortcomings regarding customer satisfaction, national or international standards and benchmarks, and the general competitiveness of a company, may lead to the decision to analyse and improve the processes involved. Several factors may be analysed and shown using a process map:
  - Cost factors: how much does each step cost?
  - Time factors: how long does a step take?
  - Responsibilities: Who is responsible for the step?
  - Risks: Many factors can contribute to risk, so the more details shown in the map, the more likely that underlying risks will become apparent. In order to identify as many risks and inefficiencies as possible, detailed maps are indispensable.

- *Process mapping for training.* Process maps make excellent communication tools to familiarize new employees with processes and tasks. Such maps must be detailed – at least in relation to the tasks that the new employee must carry out. Process maps with less detail can be used to give employees a good overview of the whole business.
- *Process mapping to design new processes.* If you are designing an entirely new process, you will want to create a clear basis before proposing any changes, whether these are for a new business, new practices or additional tasks. Process maps are excellent means to think through new processes before starting a pilot phase. Many risks and bottlenecks can be detected on paper before money and time are spent (or wasted) testing them in the field.

## **Box 2**

### **Goal setting – case study: YES Hospital Cash**

After eight months of running YES Medical Cash, Mr Doit, the project leader at YES, learned that clients were dissatisfied with customer service. The company's advertising promised claims settlement within 48 hours, but in reality it took three to four weeks until claims were paid out. Most worryingly, some clients who had filed claims complained that there had been no response at all from the company. In addition to these customer complaints, the chief operations officer of BFC, Ms Bold, expressed serious concern that the hospital cash insurance product was absorbing too much of her staff's time.

In order to better understand where the issues came from and what should be changed, as the project leader at YES, Mr Doit decided to invest in a process-mapping exercise in order to identify the causes of the complaints and which areas could be improved. He contacted Ms Bold to discuss the issues.

It very soon became clear that neither of them really knew what was happening on the ground. Obviously, front-end staff were not following predefined processes, otherwise there wouldn't have been a problem. They realized that what they needed first was a clear picture of how claims processing was actually being done. They agreed that processing time and responsibilities should be closely analysed in the mapping, as both dimensions had given rise to complaints. Other activities, such as premium collection and financial reconciliation between YES and BFC, were deliberately excluded.

For Mr Doit and Ms Bold the goal was clear: improve client satisfaction while reducing the administrative burden on both BFC and YES in order to secure financial viability. They agreed to take a fresh unbiased look at how business was currently being done and how it could be done more efficiently.

With new processes it is also important to get the level of detail right. If a map is drawn to secure support from management for a new idea, less detail is likely to be necessary than for a map introducing a new process. On the other hand, a map used to instruct people on what to do should contain sufficient information for the person to do the work correctly. The level of detail to include is often as much art as it is common sense. 'Provide insurance' is far too broad a step; whereas 'pick up the pencil' is far too detailed. The rule of thumb to remember is to provide no more and no less information than is needed for your particular audience.

### Which processes?

As a general rule, it is easier to draw maps for new processes than for existing ones. However, the mapping of existing processes may reap huge efficiency gains. For microinsurance processes, it usually makes sense to start with claims administration or premium collection, as these processes are critical to customer satisfaction, efficiency and fraud detection.

- *Start with rough processes* and add detail as needed.
- *Prioritize important processes*, because mapping the process flow of a whole business in detail is a lot of work.

Mapping can take place at the macro- or microlevel. However, it is not always obvious where to draw the line between the two (and there is no strict right or wrong).

- *Macroprocesses* are the core processes within an organization, and a macroprocess map is drawn with a certain level of abstraction. It is an overview map that shows what a company does, without all the details reflected.
- *Microprocesses or subprocesses* describe details within macroprocesses, for example showing how authorization for a certain task is obtained. Describing microprocesses is very useful in improving efficiency and quality. Examples are shown and discussed in section 3.5.

For higher management, an overview map depicting all macroprocesses can be very useful in locating problems and identifying the processes in which they occur.

### Typical macroprocesses in microinsurance

From a high-level perspective, microinsurance operations are no different than any general insurance operation: policies have to be sold, premiums collected, contracts renewed and claims paid. In microinsurance there is often an additional operation, which is the institutional interaction between the risk-taking insurance company and the delivery channel.

In a more complex case, a broker might be involved, who will likely have to deal with both institutions. Simpler processes are also possible, such as mutual funds owned by an MFI. For the purpose of explaining the principles of process mapping, the intermediate level of complexity found in a partner/agent model with a voluntary product is presented in our case study.

Typical macroprocesses in microinsurance are:

- *Sales*: This macroprocess covers activities from the first client contact through to successfully registering him or her as a new client and delivering an insurance certificate. Related microprocesses include marketing, clarification of questions, applying for microinsurance, closing the sale, getting the application to the insurer, receiving the policy document, collecting the first premium payment and distributing the policy document to the client.
- *Premium collection*: This macroprocess covers everything related to collecting premiums from the client and transmitting them to the risk-taking partner (normally an insurance company) and checking for clients with outstanding premium payments.
- *Renewals*: Renewing an insurance contract is not the same as enrolling a new client. It requires reminding the client of upcoming renewals, collecting new premiums and providing an updated insurance certificate.
- *Claims processing*: Claims payment is one of the most important processes in insurance: low-income clients in particular expect swift payment, as they usually need funds immediately. This macroprocess covers all steps from informing the agent of the claim, to submitting the required documents, checking validity, registering in the MIS, approval/rejection and ultimately disbursement and final filing.

## **Step 2: Create the business case, get backing from the top**

Process mapping is not something to be squeezed between other tasks. It must be allocated enough resources and time; otherwise it is likely to fail. It is crucial that process mapping has support from management and that everyone participating is able to allocate time for it.

In order to get full support from management, you probably need to design a full project or business case to show why a process-mapping exercise is important. If so, include the following:

Gains for the organization:

- Improved transparency
- Identification of inefficiencies: greater efficiency means cost reductions
- Risk reduction
- Improved customer satisfaction
- Basis for training new staff, communication

Costs:

- Estimate resources (time, people) for mapping, analysis and implementation
- Software

### Box 3

#### Creating the business case – case study: YES Hospital Cash

Mr Doit and Ms Bold had read about process mapping, but had never done it themselves. They believed that its structured approach could be very valuable for the entire operation by helping them identify areas of concern. From what they had read, process mapping promised at least three gains:

- Improved staff efficiency and motivation;
- Lower costs as a result of greater staff efficiency and smarter ways of doing business;
- Greater customer satisfaction, because claims would be paid out much faster and customers would receive better information about the status of their requests.

Ms Bold was sure that a clear understanding of how the whole claims processing was organized would help her better organize the training of new staff at BFC. For Mr Doit as the insurer, there was also the risk reduction aspect. The YES company was suffering from bad publicity, with some customers dissatisfied with service. But more than that, there could be no accurate calculation of reserves and ultimately of financial performance if there was uncertainty about whether valid claims were being communicated to YES in time.

Mr Doit and Ms Bold decided to prepare two process-mapping business cases for approval by the general manager: the first to be done on their own and the second to be done by an experienced process-mapping consultant. Obviously, the option with external support would cost more, but Ms Bold was convinced that she would learn much more from an expert. She argued that the extra cost would be a saving in the long term, as she would then be empowered to do her own process mapping effectively.

As a basis for the business case, Mr Doit and Ms Bold agreed on the following assumptions and estimates:

**Gains:** Some 3,700 customers (about 7 per cent) of the potential target market had bought YES hospital cash insurance. In the absence of considerable improvements on the service side, Ms Bold estimated that they would be able to increase the penetration rate to 10 per cent, equivalent to about 5,500 clients within 12 months. She feared that many existing clients would not renew their policies after the first year, as they would have observed the negative experience of their fellow customers. However, if the problems could be fixed quickly, she believed that penetration rates of 15 per cent within 12 months and 35 per cent within two years would be possible.

#### Option A (without external consultant)

- Staff time: 15 days each for Mr Doit and Ms Bold (literature review, learning to use new mapping software, preparation, workshop and interviews, drawing maps, analysis and formulation of recommendations);
- Staff time others: workshop: 5 x 1 day, 10 x 0.5 days = 10 days;
- Cost of software license: US\$140.

#### Option B (with external consultant)

- Staff time: 7 days each for Mr Doit and Ms Bold (preparation, briefing by the consultant on state of the art and how to use mapping software, workshop and interviews, review of analysis and report);
- Consultant: 10 days;
- Staff time others: workshop: 5 x 1 day, 10 x 0.5 days = 10 days;
- Cost of software license: US\$140.

Ms Bold was able to convince the general manager of the benefits of hiring an external consultant by arguing that she would learn much more and later be able to do similar exercises on her own.

### **Step 3: Assemble a team, structure the mapping procedure**

A process map should not be produced by one person alone, especially when mapping an already existing process. Putting together a team is crucial to the success of the exercise, although someone does need to take a clear leadership role. If your organization has an internal audit department, that is probably the right place to locate process mapping. Alternatively, you can outsource it. This will cost more, but may prove more efficient and lead to better results, because an outsider will probably take a fresh and unbiased look at your organization.

#### **The team and the team leader**

The person responsible for the whole process-mapping exercise (referred to as the 'leader' or the 'team leader') needs to be sufficiently empowered for the task. An important aspect to consider when choosing a leader is his or her objectivity. For example, the operations manager would not normally be a good choice, as s/he is responsible for the processes currently in place and may even have set them up. Also bear in mind that staff may be reluctant to be completely honest when interviewed by their boss.

Ideally, the team leader will have a good general understanding of the organization, be motivated to question old practices and be generally respected, with enough influence to later drive the implementation of changes. The leader should also be someone with good communication skills and experience in group interviews or focus-group discussions.

For large and diverse organizations, a relatively small core team representing the different branches and departments should assist and complement the leader and help conduct interviews. In smaller organizations, it may be possible to assemble a team whose members represent every step of the process and every organizational level. Whether the organization is small or large, team members should be encouraged to question processes and eventually improve them. Thus they should be experienced staff that understand the business beyond the boundaries of the single process they are engaged in. If you are designing an entirely new process, the team can be smaller and made up of staff who know similar processes. The more participatory the designing of a new process, the more likely is a smooth implementation and the greater the 'buy-in' by people affected by the change.

Mapping an existing process may take up to 10 working days, although few of the individuals involved will need to put in that much time. All team members and all staff interviewed should get thorough training in process mapping and be given enough time to carry out the task properly. Without sufficient time and

motivation, there is danger that not enough work and thought will be put into the mapping.

Interviews can be carried out with individuals or with groups. Group interviews are advisable only if the leader is an experienced facilitator and has the skills to manage group discussions. It is important that there are no negative consequences if the individuals interviewed explain honestly how certain processes are carried out. Employees who are not carrying out their tasks efficiently might be reluctant to be honest about this. In such cases, an explanatory message from the chief executive officer could help: announcing why process mapping is done; that the aim is to help both staff and the overall organization; that honest answers are really valuable; and that there will be some level of confidentiality.

### Structure the mapping process

A *kick-off* meeting with the whole team is usually very positive: the team leader can explain the overall task and divide the work according to knowledge and skills. The following should be prepared beforehand and clarified at the meeting:

- List people who need to be interviewed to obtain further information.
- Set a time line, milestones and outputs (and decide who is responsible for what).
- Decide on the working format: sticky notes, cards, pen and paper, software.

#### Box 4

#### Assembling a process-mapping team – case study: YES Hospital Cash

Mr Doit and Ms Bold agreed to do the process mapping together. They decided that after initial preparations undertaken by *project leaders*, they would hold a kick-off meeting with the newly appointed core process-mapping team. This would be followed by an initial process-mapping workshop, for which the core team would organize and select suitable participants. The findings of the workshop would then be discussed in one-to-one interviews with peers.

- **Core process-mapping team:** The team consisted of Ms Bold and Mr Doit, a senior credit officer from BFC, a senior claims officer from BFC and a senior claims officer from YES. This team was to be responsible for preparing and steering the whole project, organizing workshops and making recommendations.
- **Participants in the initial process-mapping workshop:** In addition to the core team members, Mr Doit and Ms Bold planned to invite two credit officers working at a southern branch, a senior credit officer managing a northern branch and a claims officer at BFC headquarters (HQ). A claims officer from YES completed the workshop crew, bringing the number of workshop participants to 10.
- **One-on-one interviews:** The outcome of the process-mapping workshop would be a map reflecting how business is currently done. Before proposing any changes, this map would need to be validated by others involved. It was decided that the map would be discussed with the senior credit officer and/or the credit officers of four other branches and an additional claims officer from YES.

## Step 4: Outline the process and gather data

### Outline the process

Before embarking on detailed action, the process(es) under consideration should be clearly outlined according to these steps:

1. Give the process a concise name that stands for the action performed within it.
2. Define the boundaries of each process: how is it triggered? (starting point); how does it end? (output).
3. Determine which parties or departments are to be involved. If you are mapping a subprocess, determine which functions are to be involved.
4. Define the major process steps and give them concise names.

#### Box 5

##### Outline the process – case study: YES Hospital Cash

Mr Doit and Ms Bold decided that mapping the claims process would be their highest priority. As a *starting point*, they chose the act of a customer arriving at a BFC branch to file a claim. They debated for quite some time whether the process should start when the client is discharged from the hospital, but finally decided that, as they couldn't control this step in any form, the relevant starting action was the client wanting to make a claim.

The end point was clear: either the claim was approved and the client indemnified, or the claim was rejected. Thus two possible *end points* were defined:

- Claims payment awarded to client and signed receipt filed
- Claim rejected and client informed accordingly

They identified the *primary departments and organizational entities involved* as:

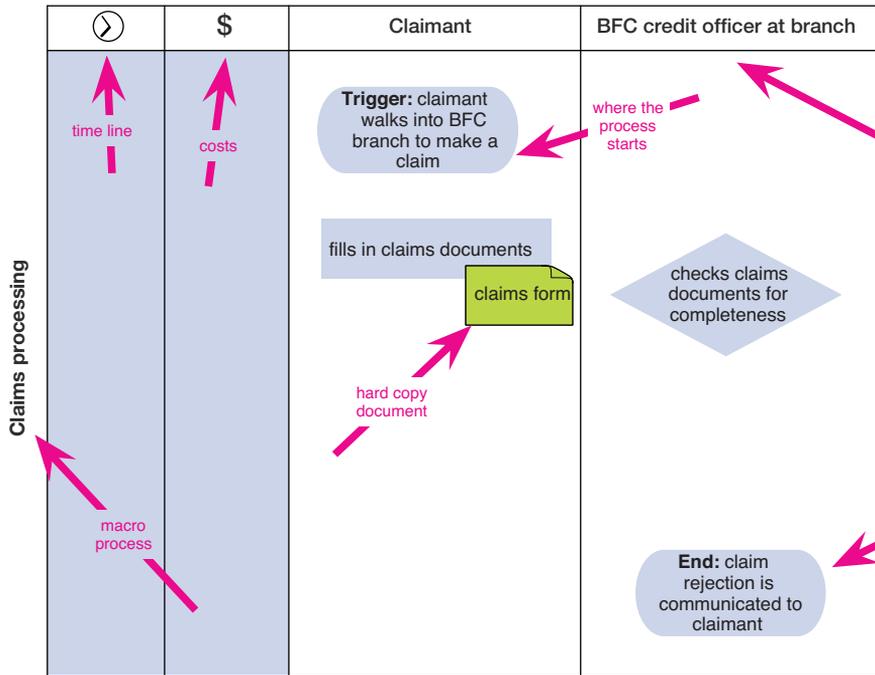
- Customer/claimant/beneficiary
- BFC credit officer at the branch
- Ultra Fast Delivery (UFD), a private courier service
- BFC claim officer at HQ
- YES claims office

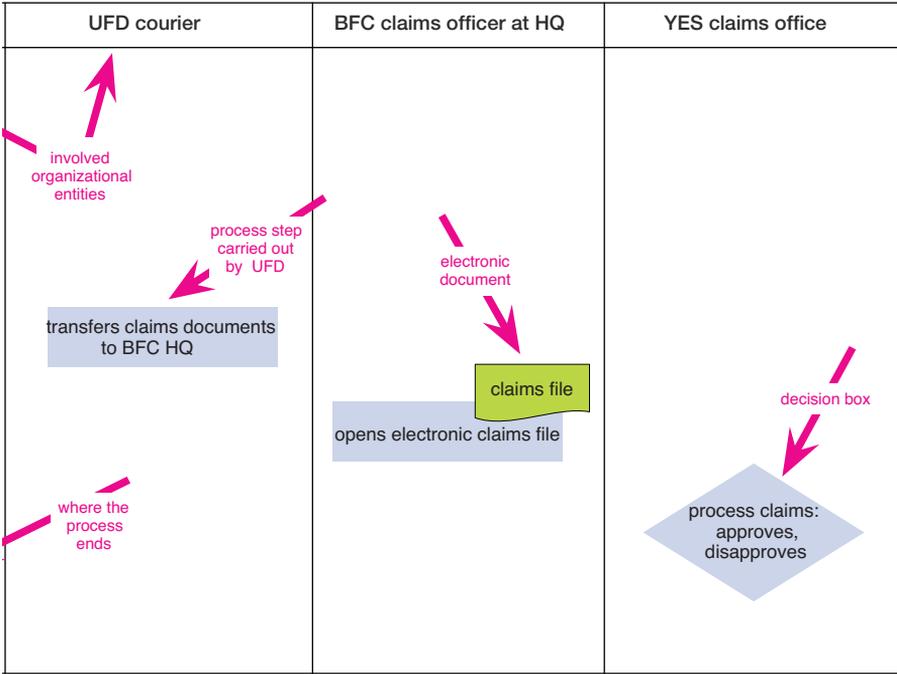
They identified the *major process steps* as:

- Submit claims documents: when the claimant goes to the BFC branch, fills in the claims form and hands this, together with the claims document, to the credit officer
- Check claims documents for completeness
- Transfer claims documents to YES
- Process the claims: approve or reject the claim
- Inform customer of outcome
- Pay claim if approved
- File signed receipt

From this information, they were able to construct the map shown in figure 5.

Figure 5. Outlining the claims process





## Gather data

It is probably best to start off with a brainstorming session with the team on the process(es) to be mapped. Alternatively, the facilitator could present a rough version of the process and map in one-on-one meetings with team members, gradually improving the map as the discussion proceeds. Maps of existing processes should be based on actual findings, *never* on existing manuals or process maps.

If the whole team works together from the outset, unclear or overlapping tasks and responsibilities can be discussed immediately. However, this approach requires that the leader has strong facilitating skills or that an additional facilitator is involved. It also might prove difficult to bring everyone together at one time for a workshop. The approach used depends largely on the experience and preference of the team leader, as well as on the complexity of the process to be mapped.

Whichever approach is used, it is essential that team members really feel consulted and truly participate in the mapping process. They must feel that they are being taken seriously and must feel comfortable telling the truth. This requires diplomacy, honesty and clear communication, as many people interpret 'more efficient' as code for 'fewer jobs'. The emphasis should be on how an improved process can assist all involved staff, making their lives easier and helping them concentrate on core tasks.

If your mapping process includes field surveys, a questionnaire covering at least the following points will prove helpful:

- Process descriptor;
- Person/position carrying it out/responsible for it;
- Frequency of process (how often it is performed per day or per week);
- Time taken to carry out the process steps fully;
- Inputs required (such as documents and signatures);
- Outputs produced (such as new files and system entries);
- Costs other than wage costs (for example costs of communications and printing).

When gathering data, you will probably encounter gaps or suspected deviations from the 'normal' process. If a manual exists for any of the processes you are mapping, you will have to assess whether the process is following the method given. The manual may, for example, describe steps that are important for control purposes, while front-line staff may be taking shortcuts to make business processes more 'efficient'. Understanding the reasons behind these deviations may shed light on important aspects of the process.

The map should be verified by interviewing several front-line staff in order to capture all variants of how business is being done. If variations are detected, several *as-is maps* should be drawn. It is advisable that only one person, normally the process-mapping leader, actually draw the map(s), so that there is consistency of style and logic.

## Step 5: Draw a detailed map

It is recommended that your process maps show the departments involved, the time taken and the costs per step. This approach leads to maps that are easy to read, yet contain a wealth of information.

In drawing the details of your map, each process step should cover the following questions:

### ■ *What is happening in this step?*

Main or macroprocesses may be divided into subprocesses or single process steps (tasks), which may or may not be described in detail. The level of detail always depends on the purpose of the map. If you want to analyse risks involved in the whole macro process, it makes sense to depict each step in detail. On the other hand, if you are preparing a manual specifically for staff that deal with clients, you do not need to describe in detail what other employees do.

### ■ *When is it happening?*

The process steps or subprocesses have to be put in the right sequence, starting at the top and finishing at the bottom of the page.

### ■ *Who does it?*

The process step symbol is always placed in the column for the function, individual or department that performs it. Unless specified otherwise, the one that performs the task is also responsible for it.

### ■ *What are the inputs and outputs?*

This information captures the interface between the different process steps. What kind of document is handed over, and in what form (hard copy, digital)? Is there a special documentation step that defines the input or output of this step (e.g. entry in database) or does an existing document within the process serve this function?

#### ■ *How much time does it take?*

How much time is spent on this process step? In many cases, daily workflow may not be smooth, but organized in batches: for example, sending documents twice a week to head office, or a claims committee meeting every Wednesday. This should be shown on the map. Simply indicate hours and weekdays where appropriate.

Three different types of time can be distinguished:

- *Active, value-adding time*: at the end of the step, the information status is altered, new insights are gained, a new document or data entry into an MIS is created;
- *Dead time*: passage of time in which there is no actual processing of the content or storing of a document (e.g. waiting periods, batching of applications, shipping and mailing);
- *Client time*: time taken for a client to travel to a branch or wait in the queue. When designing processes, all too often the client's time and efforts are forgotten, because they do not cost the business directly. However, an important factor for making a product attractive to the client is that minimal effort is needed from the client side.

Although these three types of time help to identify bottlenecks and time-wasting steps, they also add complexity to the map. They should therefore be differentiated on the map only if really needed.

#### ■ *How much does it cost?*

Similar to the time line, an axis for costs can be introduced, if required, showing how much each step costs. Costs include *external* costs such as fees to external service providers (for example, for cashing checks), stationery (forms, documents, letters) and office supplies (toner, ink cartridges, disks), communications costs (phone, fax, e-mail) and *internal* costs, such as employee work time.

The cost axis will include some sensitive data, such as employees' wages. Thus it may be preferable to insert the cost component for analysis and discussion with higher management, but delete it in the process map sent for general distribution.

#### ■ *Why is it happening?*

Try to understand the reason why a specific step is done the way it is. Ask those performing an action for their view and their thoughts as to how it could be done more conveniently – for them, as well as for the client.

Some doubling up of tasks is required in microinsurance, especially for control purposes. The map should make explicit which tasks are done for control purposes only, as opposed to those tasks focused on the content level.

**Box 6****Detail the map – case study: YES Hospital Cash**

Mr Doit and Ms Bold's workshop aimed to really understand what was going on at every level during the claims process. The final list of participants consisted of: two credit officers working at a southern branch, a senior credit officer managing a northern branch and a claims officer at BFC HQ. From YES, two claims officers working in the claims department and the senior claims officer were invited.

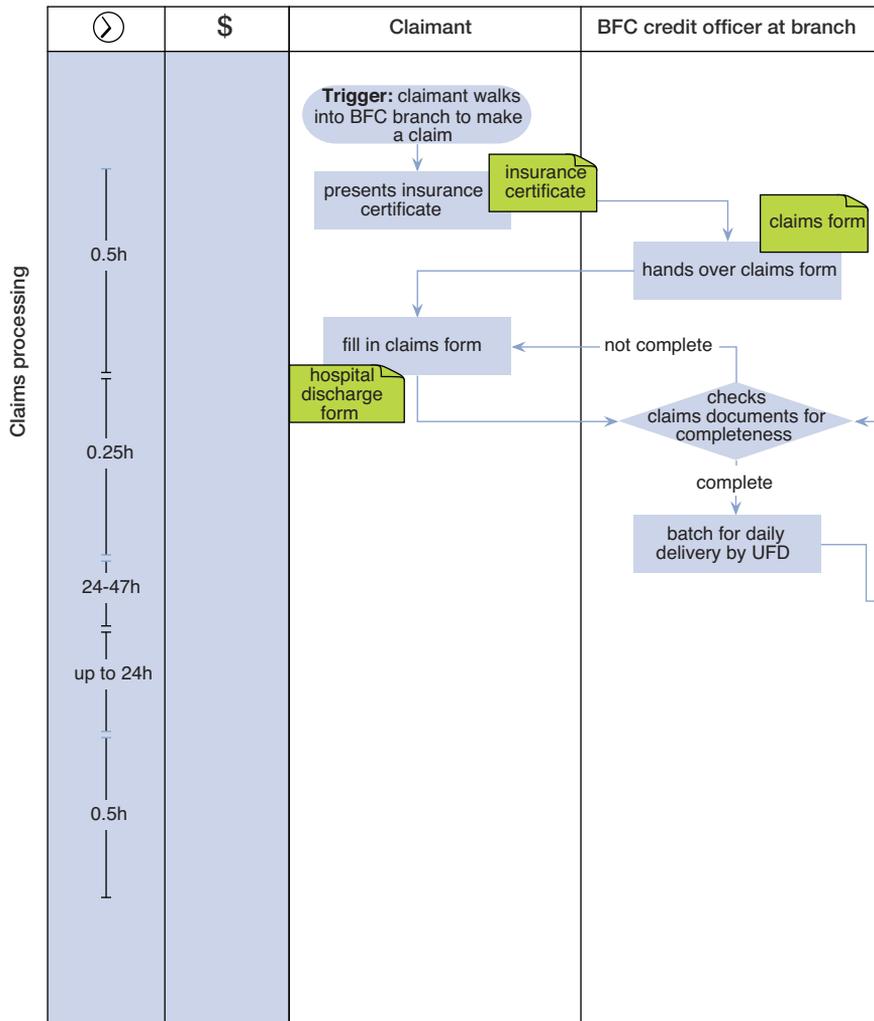
After a long and tumultuous discussion, the following picture emerged:

- To make a claim, clients are requested to go to a BFC branch. There, upon presentation of their insurance certificate, they get a claims form from the credit officer, fill it in and, together with the hospital discharge form, hand it back to the credit officer. Including waiting time, this takes on average 30 minutes.
- The credit officer briefly checks the forms submitted by the client for completeness (on average 15 minutes) and batches all of them for shipment to BFC HQ through the courier service UFD. Shipments are done daily. Mail is picked up at 10 a.m. and delivered within 24 hours.
- At BFC HQ, the claims officer again checks the claims documents (though often only the next day). Documents that appear to be incorrect or incomplete are sent back to the branch. If everything is in order, the claims officer opens an electronic claims file in the MIS (average time 30 minutes) and then sends the physical documents through UFD to YES. Shipments are done daily, with mail picked up at 6 p.m. and delivered at 9 a.m. the next day.
- At YES, the claims officer checks the validity of the claim. Normal cases can be processed within two working days, but if there are inconsistencies or questions, it can take more than a week. The senior claims officer then signs off on all decisions made by the claims officer. Average turnaround time is estimated at 10 days, although there is no direct proof of this, as there is no claims tracking system currently in place.
- Claim documents for approved claims are filed at YES, while rejected claims are sent back to BFC.
- At 5 p.m. of each working day, YES e-mails a consolidated list of all newly approved and rejected claims to BFC's claims officer.
- The claims officer at BFC makes the necessary entries in the MIS and e-mails the credit officer responsible for the clients concerned. Normally this takes 6 hours for the whole batch of claims.
- The credit officer informs his/her client of the decision (10 minutes on average, as sometimes s/he has to make multiple calls or explain the process).
- Clients whose claims are approved have to come to the BFC branch to receive the payment from the credit officer. Most clients come in the same day they are informed, or the day after.
- The credit officer sends the receipts through UFD to the claims manager at BFC HQ (24 hours).
- BFC's claims manager enters the date of settlement into the MIS and files the receipts, which typically takes 5 hours per batch.

### Step 6: Finalize the map

After the first complete draft of a map has been drawn, the team needs to look at it and give further feedback. Does it really mirror what is happening or does it gloss over inefficiencies or lack of clarity?

**Figure 6. As-is map for claims process: YES Hospital Cash**



For certain process steps there may be different versions, especially if different people carry out the same task in different branches or locations. No matter how many versions, make sure they are all mapped and explicitly labelled. Mapping several existing versions of a process can be very useful when you will later try to optimize the process. You can map certain subprocesses separately, or use dotted arrows and different colours for different versions of the same process.

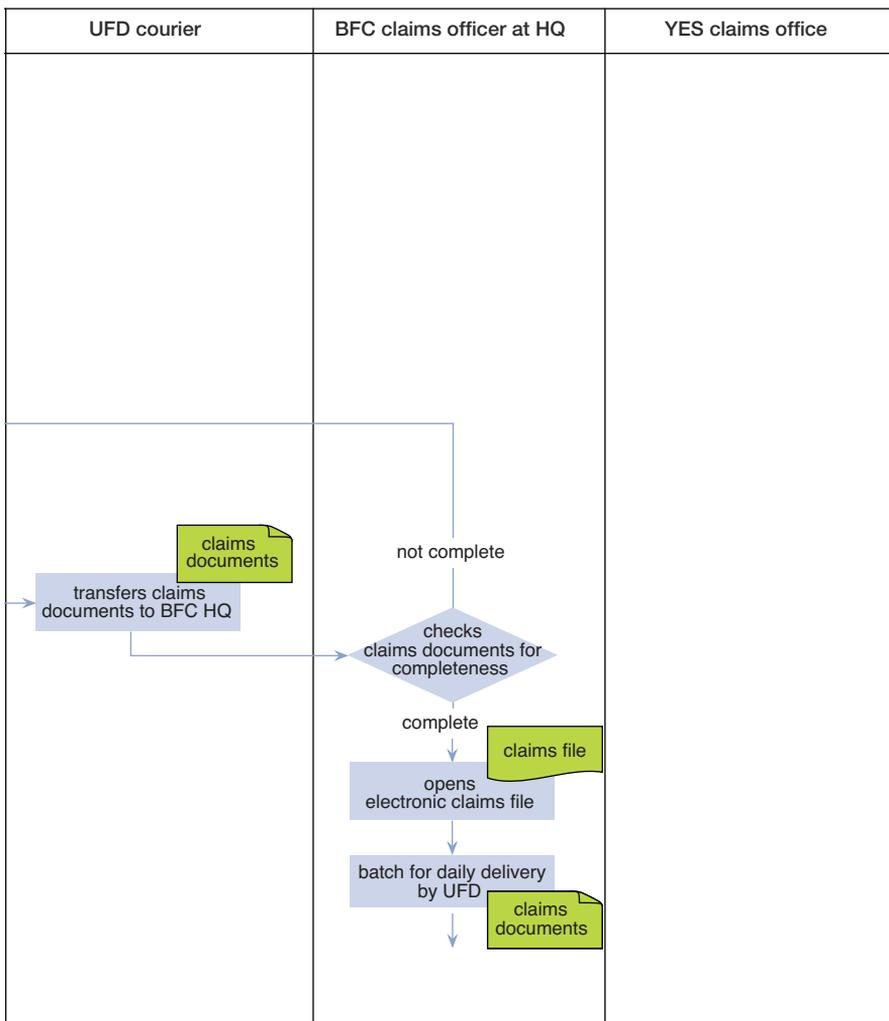
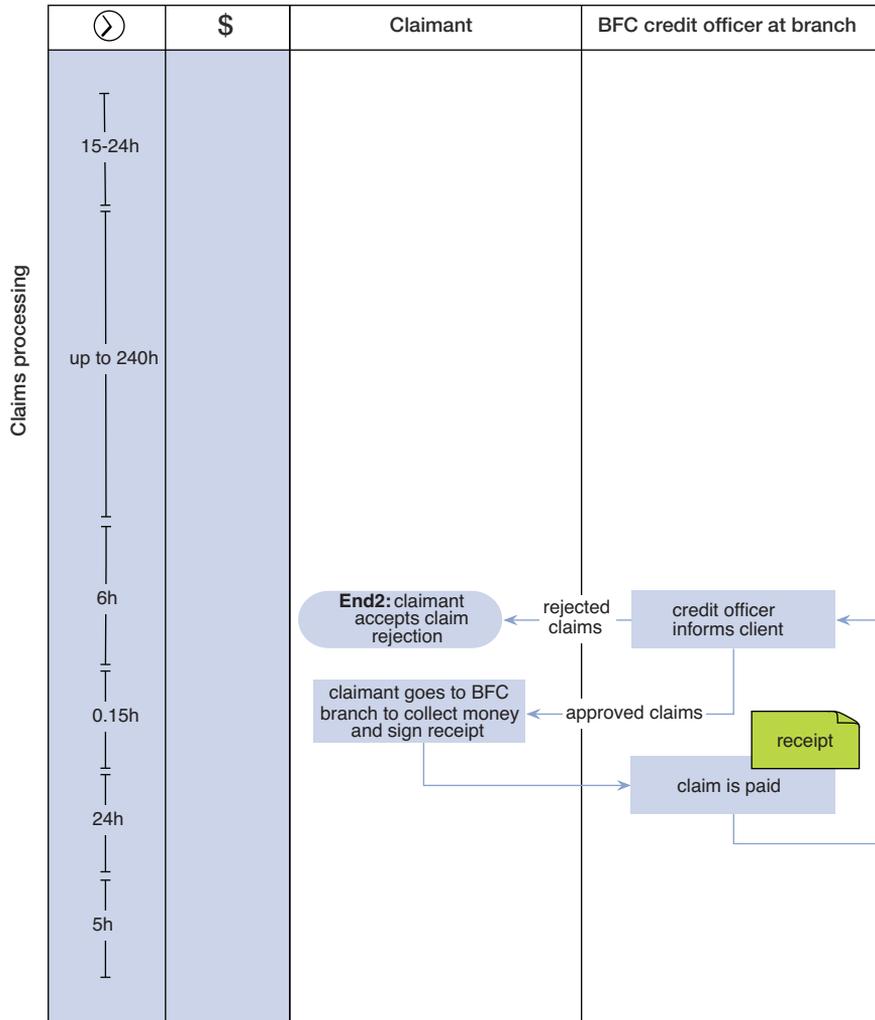
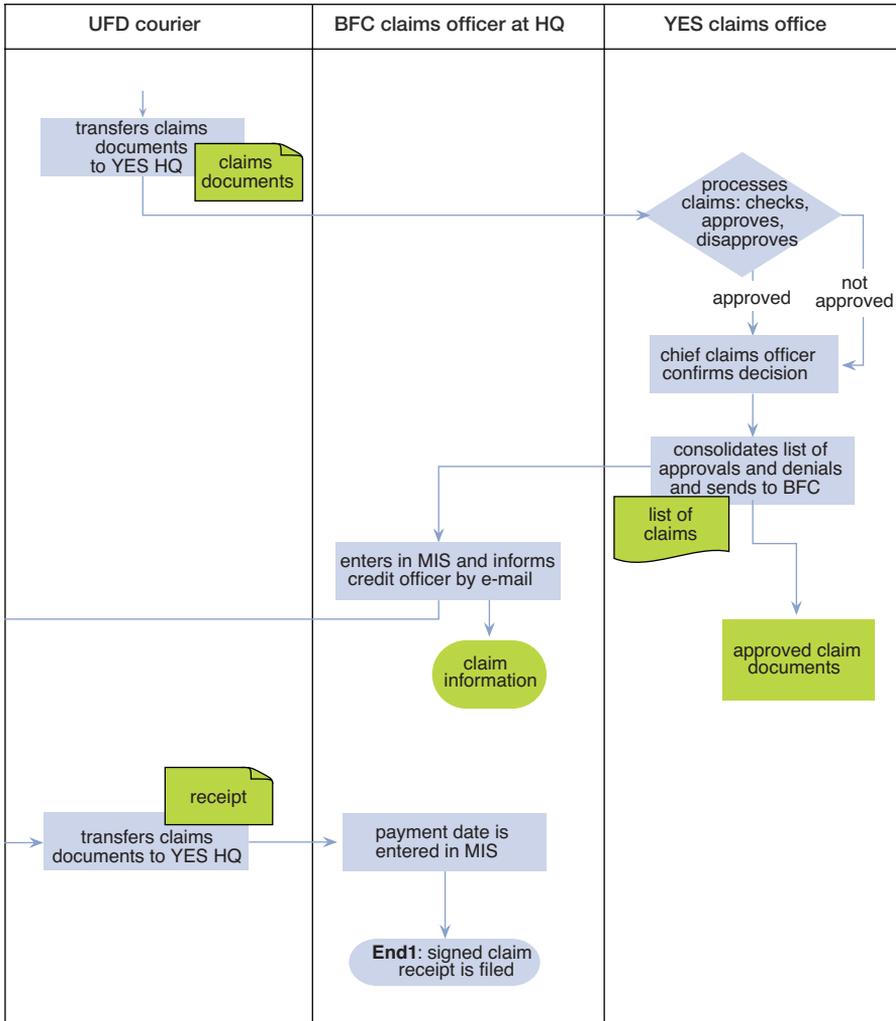


Figure 6. *As-is map* for claims process: YES Hospital Cash



YES Hospital Cash claims process *as-is map*, 31 August 2009.





## 4. The art of analysing and improving processes



## 4. The art of analysing and improving processes

The main goal of process mapping is to improve an existing process or set up an optimal new process. In order to achieve this, a detailed analysis of the map is necessary, and all relevant aspects of the map must be scrutinized.

The purpose of the analysis is to uncover inefficiencies, risks, bottlenecks and unnecessary complexities. This is the basis for an improved version of the map, known as the *should-be map*. This map is established in two stages. First, an idealized *should-be map* is produced, then it is tested in reality, and after a certain trial period a final *should-be map* is established.

Analysis is always done on an *as-is map*. However, even if you are mapping a new process or revising a *should-be map*, a thorough analysis must be carried out as discussed below.

### **Involving the team**

It is best to involve the whole mapping team in process analysis. Employees often already know which processes are inefficient and they have ideas about how to improve them. But even if they don't have such ideas, the mere fact of staff participating in the optimization process will mean that there is a greater chance that implementation of the new process will proceed smoothly.

## Finding areas of concern

### Reducing complexity

Processes often grow 'organically' without thorough planning, and process maps can reveal how surprisingly complex such processes have become. It is always worth asking whether the existing level of complexity is necessary and whether it is possible to simplify a process.

#### Questions to ask to reduce complexity:

- Are all process steps necessary? (Excessive handover of work, in particular, adds unnecessary complexity.)
- Are the tasks sufficiently consolidated? (One wants to avoid over-specialization.)
- Do all people currently involved really need to be involved?
- Are all supervision and control points really adding to quality?
- Does the order of process steps make sense, or can you reduce complexity by changing it?
- Are the same data being manually captured on more than one system?

#### Measures to take:

- Eliminate unnecessary process steps.
- Consolidate tasks.
- Reduce excessive control and supervision (multiple approvals).
- Simplify the sequence of steps.
- Reduce manual steps between computer systems.
- Eliminate double registration, such as entering the same data twice in separate IT systems.

**Box 7****Analyse complexity – case study: YES Hospital Cash**

The *as-is map* derived from the BFC/YES mapping workshop was confirmed through several one-on-one interviews. It showed at least two areas where processes could be streamlined:

- **Issue 1: Checking of claims documents.** Currently claims checking is done three times: in a first step by the credit officer at the branch, then by the claims officer at BFC HQ and finally by the claims officer at YES. The analysis showed that while YES returns only 1-2 per cent of all submitted claims to BFC's claims officer, the rate of incomplete claims handed in by the credit officers to BFC is about 25 per cent.

**Solution 1:** Credit officers should be better trained in claims handling, as the current process adds significantly to work and delays. As things stand now, claims officers have no real incentive to do a good job, because they know that HQ staff will check each case again. Ms Bold proposed adding a small bonus element to encourage careful claims handling, with penalties if the rejection rate rises above 5 per cent.

**Solution 2:** A more radical proposal was that the claims office should be eliminated completely, as all documents will be checked again by YES. This proposal would obviously change the claims process substantially.

- **Issue 2: Senior claims officer at YES.** The added value of signing off on the claims decisions made by claims officers turned out to be minimal for microinsurance claims. There were hardly any cases where the senior claims officer didn't agree with the proposed decision. Yet because he was so busy, waiting for his approval prior to informing BFC about the outcome was causing an average delay of up to a week.

**Solution:** Empower the claims officers to decide on YES hospital cash claims without further approval. Instead of systematic sign-offs, initiate periodic claims analysis by the internal audit department. This will cost less and speed up the claims process.

## Analysing responsibilities

Many delays or errors in processes occur because people's responsibilities are not clearly defined. For any business process, it should be obvious who does what and who is accountable for it.

### Questions to ask to reduce complexity:

- Is there a person who is clearly responsible and accountable for each processing step?
- Who signs the relevant document(s)?
- Is there anyone who has to be consulted for a task to be completed?
- Is there anyone who needs to be informed for a task to be completed?
- Are there deputies for each task if someone is ill, on leave or resigns?

### Measures to take:

- Every process step must clearly specify who is responsible for carrying out the task and who is responsible for seeing that the task is completed (this is often the same person).
- Clarify who can authorize what.
- Set clear rules about the communication flow.
- Appoint (and plan to train) deputies for each position.

### Box 8

#### Analyse responsibilities – case study: YES Hospital Cash

In general, the process map showed that the responsibilities were clear. Everyone knew what his/her tasks and responsibilities were. There was, however, one area where responsibility did not seem to be distributed wisely – in the checking of claims documents.

- **Issue: Checking of claims documents.** As mentioned above, this step is done three times. There are two possible causes for the poor performance of credit officers when handling claims documents. First, they may not feel fully responsible for checking the documents, as they know that the claims officer at HQ will check again. Second, they may lack proper training to carry out this task.

**Solution:** If the credit officers get better training in claims handling, they should be able to improve their performance and assume the whole responsibility for checking claims documents within BFC branches. The check at BFC HQ could then be eliminated.

## Analysing risk

Often a primary goal for the whole process-mapping exercise is to reduce and control the various types of risk. Some, such as fraudulent claims, have direct financial consequences. Others are more difficult to quantify, such as poor customer service.

Risks can be classified according to their probability of occurrence and the weight of their impact. Those with high probability *and* high impact should be tackled first. Second priority should be given to those with low probability and high impact.

Properly designed microinsurance processes will minimize at least three areas of risk: fraud, data inconsistency and tarnished reputation. Even though these are all closely interrelated, it may be useful to analyse them separately.

- **Fraud** tends to occur either with the handling of cash (premiums as well as claims) or with forged documents. Two crucial tasks here are client identification and making sure that the documents supporting a claim are really connected to the claimant. Bear in mind that it is not only insurance clients who may be trying to deceive you, but possibly employees of your own business and partnering institutions. People handling cash are especially prone to the risk of fraud. There are also other fraud risks besides simple cash transactions, for example in medical insurance fraud occurs through patient substitution or over-treatment by physicians.
- **Data inconsistencies** may result from multiple data entry into different systems or from data sets containing conflicting entries. Keying the same data into separate systems will inevitably lead to inconsistencies. Thus one should aim to have data captured once and then transferred among IT applications. Conflicting entries can occur when, for example, premium payments are erroneously booked to a person who is no longer a customer, or claim payments are made to a customer who did not file a claim. Such conflicting entries are best dealt with through consistency checks built into the IT system itself.

- **Reputation.** It is common wisdom that a good reputation is much more easily lost than gained. Reputation is closely tied to client satisfaction, which is based on proper information, competent answers to clients' questions and living up to promises made. Keeping clients informed at each interaction is crucial, from the sales process up to when they file a claim. Client satisfaction can be thought of as expectation management: after the interaction, clients should know what they might expect (what the next step will be or how long it will take to have a response). Documents should be easy to track down, so that any potential questions can be answered properly. Clients should receive receipts for all documents they hand in. Lost documents will definitely not inspire client confidence.

**Questions to ask in order to minimize risk:**

- What is the business's experience with risk? Has anything gone wrong before?
- How would *you* be able to cheat the system if you were a client, or if you were an employee?
- Is there any step in your process that relies solely on honesty?
- What data are captured and where? Are there ways to avoid double data entry?
- Is it possible to create an inconsistent data file in your system?
- What happens with your client records when clients cancel their insurance?
- Do you make sure that clients know what they may expect – and by when?
- Do you hand out receipts for each item (premium, claims documents) you receive from your clients?
- Is there a traceability system in place that allows you to identify where a certain document should be found or where it may have been lost?

**Measures to take:**

- Impose double signature (the four-eye principle) for steps that rely too much on the honesty of a sole actor.
- Identify your client clearly.
- Transfer data electronically rather than key them in anew.
- Build consistency checks into your IT system and run periodic analyses.
- Give clients written receipts.
- Give clients the name and contact information of a person to whom they can address complaints and further questions.
- When sending physical documents, make sure you can trace them.

**Box 9****Analyse risks – case study: YES Hospital Cash**

The claims process map for BFC/YES showed some distinct opportunities for reducing risk:

- **Issue: Double data entry.** BFC's claims officer currently sends a hard-copy list of all new claims along with the claims documents to YES. The YES claims officer then has to enter all these data anew into his or her IT system. This adds to costs and is a source of data inconsistency.

**Solution:** An immediate solution would be to send the data by e-mail to YES. For the mid-term future, both companies should consider partial integration of their respective IT systems in order to exchange data easily.

- **Issue 2: Lost claims documents.** Ms Bold reported several cases of clients complaining that their claims had never been settled. But as the clients had not received receipts when filing their claims, they could not prove having done so. Ms Bold checked BFC's MIS and could not find any claims file opened for these clients. Thus, either the clients had tried to cheat by pretending that they had filed a claim, or the claim documents got lost during shipment from the branch to BFC HQ.

**Solution 1:** Two measures could help remedy this issue. First, all clients handing in claims documents should receive a receipt. Second, shipments of documents through UFD should be accompanied by a list detailing all documents included. The courier should then sign a copy and the receiving party should check and sign that the documents had been delivered.

**Solution 2:** A more radical solution would be to eliminate the courier service altogether and replace it with an entirely digital system. Instead of sending the claims documents by courier, the credit officer could enter the claims details directly into the MIS, scan the documents and send them by e-mail to BFC HQ. HQ would then be responsible for ensuring that the entries in the MIS and the documents sent correspond. (This solution is considered in more detail in the discussion about costs below.)

**Analysing the time line**

The time a process takes can affect both customer satisfaction and cost. One major influence on the time a process takes is, of course, complexity. Reducing unnecessary complexity in a process usually also saves time.

The main goals of time reduction should be that:

- The overall time is within the range of 'best practice';<sup>4</sup>
- The customer accepts the overall time.

<sup>4</sup> Best practice' in microinsurance has been difficult to determine, as very little data are available. This situation should improve with more organizations monitoring and tracking their performance indicators. To give an example, clients usually consider 2-5 days an acceptable time for receiving compensation for a claim.

### Non value-adding process steps ('dead time')

It is useful to distinguish between value-adding time – the time in a process step that actually adds value to the product – and 'dead time', meaning the delays or process steps that customers would not normally be willing to pay for. This does not mean that all dead time is spent uselessly or can be avoided. But it makes sense to analyse each of the steps contributing to dead time to see if they are really necessary.

Examples of dead time include requiring that a certain document has to be checked several times by senior employees, or that senior employees have to sign off on a certain document often without checking its content in detail. In principle, dead time actions do not directly add value to the product. The process-mapping team should question whether the time lost as a result of such procedures is well invested.

### Delays due to bottlenecks

Time inefficiency also occurs because of bottlenecks. These could be due to staff shortages, or because of badly coordinated processes that do not always deliver a necessary input at the required time. Batched processing of documents at fixed intervals (such as the weekly meeting of a claims committee) is a frequent source of delays. Most bottlenecks can be easily spotted if the time line reflects reality accurately.

#### Questions to help reduce time:

- Where is most of the time spent? Why?
- Does each step add value either for the customer or the service provider?  
If not, what is its purpose?
- Is there any 'dead time' that could be reduced?
- Is the process unnecessarily complex?
- Do you lose time due to bottlenecks?

#### Measures to take:

- Minimize complexity.
- Minimize 'dead time'.
- Eliminate bottlenecks.

**Box 10****Analyse the time line – case study: YES Hospital Cash**

When the core mapping team looked at the *as-is map*, it became obvious that there was no way that processing claims within 48 hours could be done as promised in the YES Hospital Cash product leaflet. It was agreed that, before simply deleting this statement from the leaflet, the time for the claims process should be optimized and clients asked whether the resulting processing time would be acceptable.

The mapping team identified several ways of speeding up the claims process:

- **Area 1: Checking claims documents.** As noted above (box 7: Analyse complexity), in 25 per cent of all cases, significant time could be saved if the branch credit officers would check the claims documents properly.

**Solution:** Eliminate the loop between the credit officer and BFC's claims officer. This will easily reduce process time by three working days.

- **Area 2: Shipment of claims documents.** UFD picks up mail at 10 a.m. at the branch and delivers it within 24 hours. This means that the documents received in the branch after 10 a.m. on day 1 are only shipped on day 2 and arrive at headquarters on day 3.

**Solution 1:** Move the mail pick-up time from 10 a.m. to 5 p.m. and let the shipment to BFC HQ go overnight. This would save a whole day of processing time.

**Solution 2:** A more radical change would be to not ship the documents at all, but to scan and e-mail them. If the courier was replaced by e-mailing of digital documents, this would save twice the delivery time of 24-48 hours and holds the potential of considerable time and cost savings. It would mean that YES could start working on a claim the same day that it was presented by the client. However, this method does have its disadvantages. First, all branches would have to be equipped with a scanner, and this would only be economical if BFC used scanners in its daily credit business. Second, YES may sometimes still require the physical document to check for fraud (e.g. to see if a white-out pen has been used). In some countries it is illegal to accept a claim without seeing a physical document as proof.

- **Area 3: Signature of YES chief claims officer.** As discussed in box 7, the signature of the senior claims officer does not add any value, yet it delays claims processing on average by up to a week.

**Solution:** This step could be eliminated entirely and replaced by periodic claims audits. Obtaining this signature is a severe bottleneck, and eliminating this step could easily speed up the process by a whole week.

## Analysing costs

Costs have to be minimized for at least two reasons. First, reducing costs has a direct positive contribution to the bottom line. Second, microinsurance customers are very price-sensitive: the lower the price, the more customers can be attracted. As microinsurance sustainability is based on large client numbers, keeping costs low is critical.

The mapping team should ask these questions:

- Is the price of the service in the *should-be map* within an acceptable range for the client?
- Is the client willing to pay this price?
- Is the margin for the company at this price acceptable?
- Is the product competitive in the market?
- Are there wasted expenditures that provide limited value or could be done more cost- effectively?
- Can costs be reduced while maintaining appropriate levels of controls and process speed?

Analyse the costs for each step. Are all costs necessary? What are the costly steps and is there a way to make them cheaper?

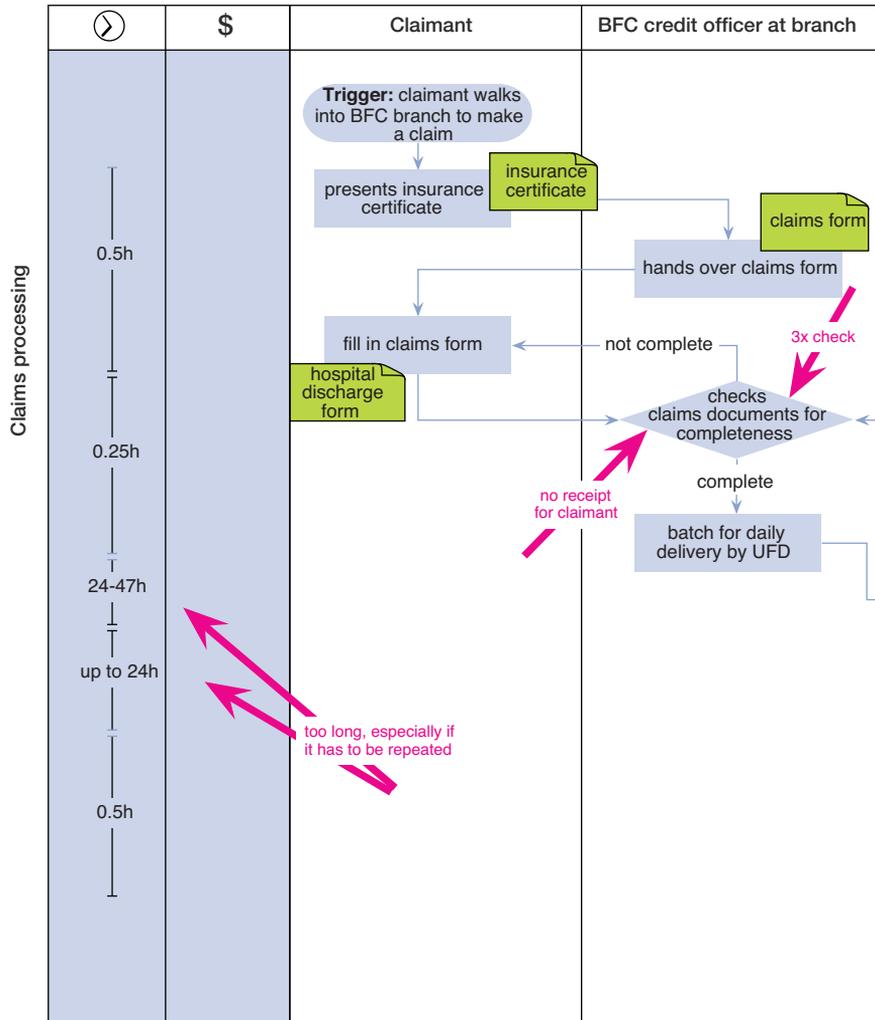
### Questions to ask to reduce costs:

- Which process step is the most costly? Why?
- How can costs be reduced without compromising quality?

### Measures to take:

- Try to reduce steps that are expensive, but add no value to the product.
- Making processes simpler usually reduces costs as well.

Figure 7: As-is map with bottlenecks and areas for improvement highlighted



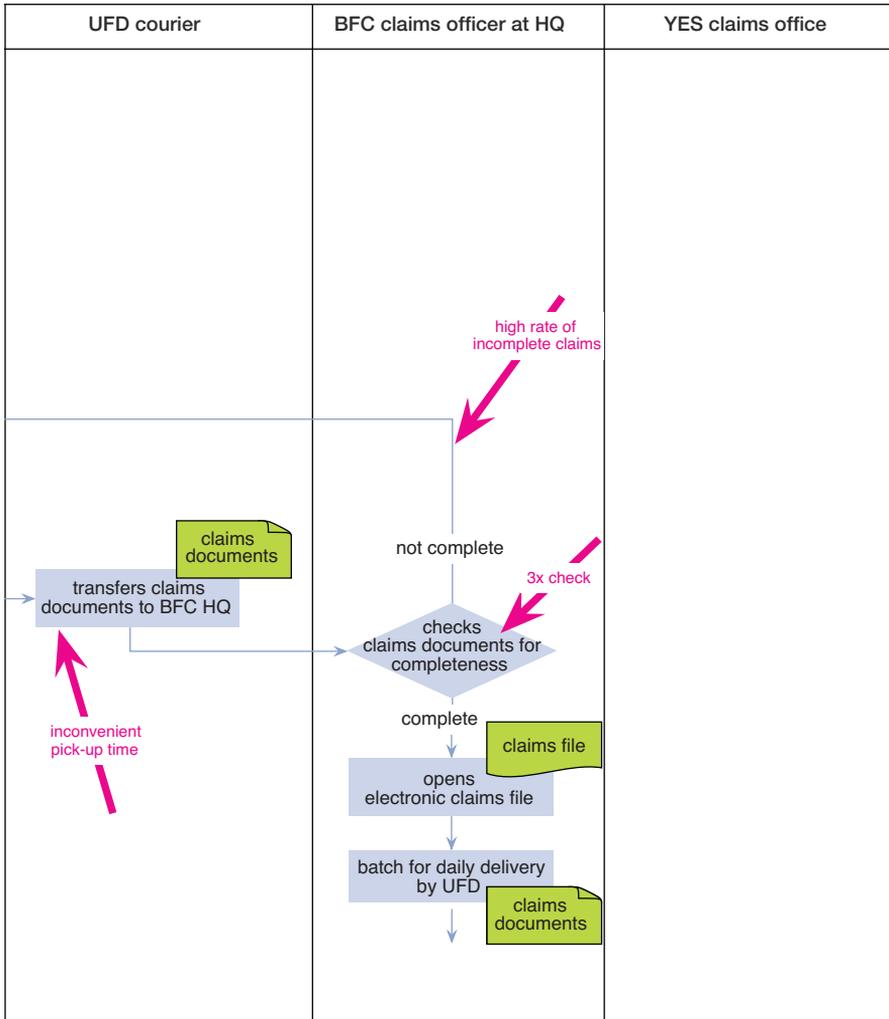
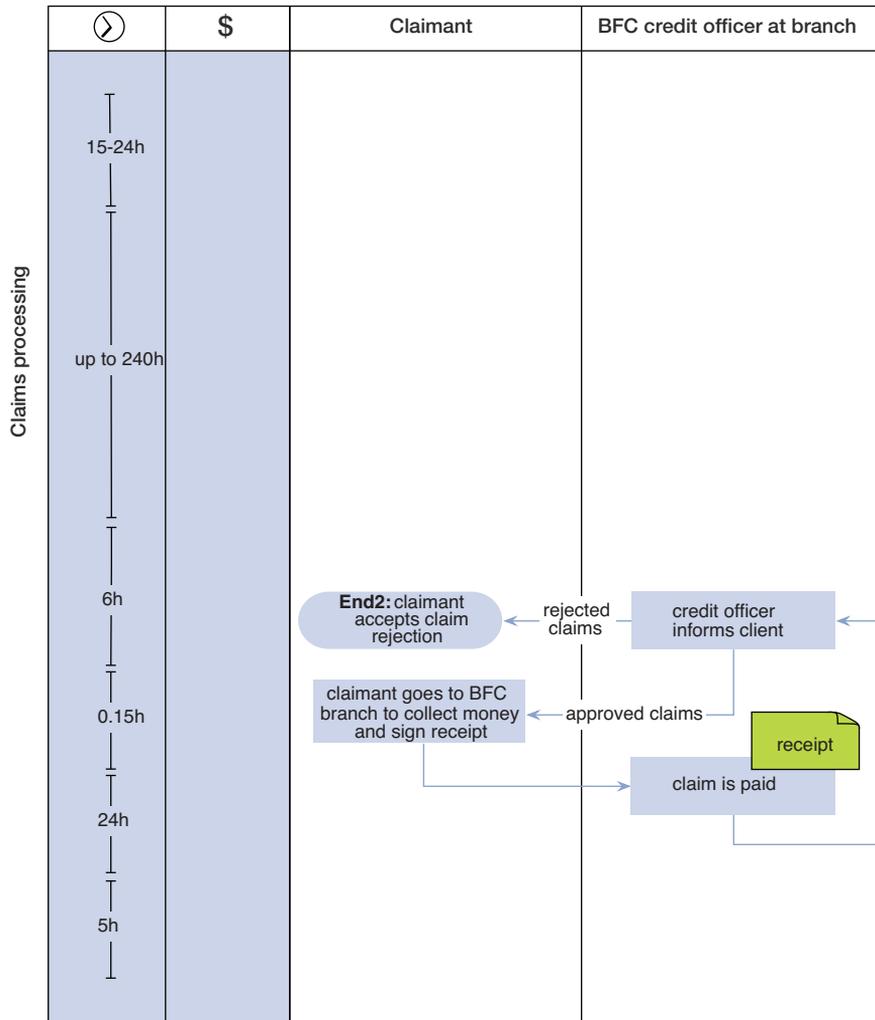
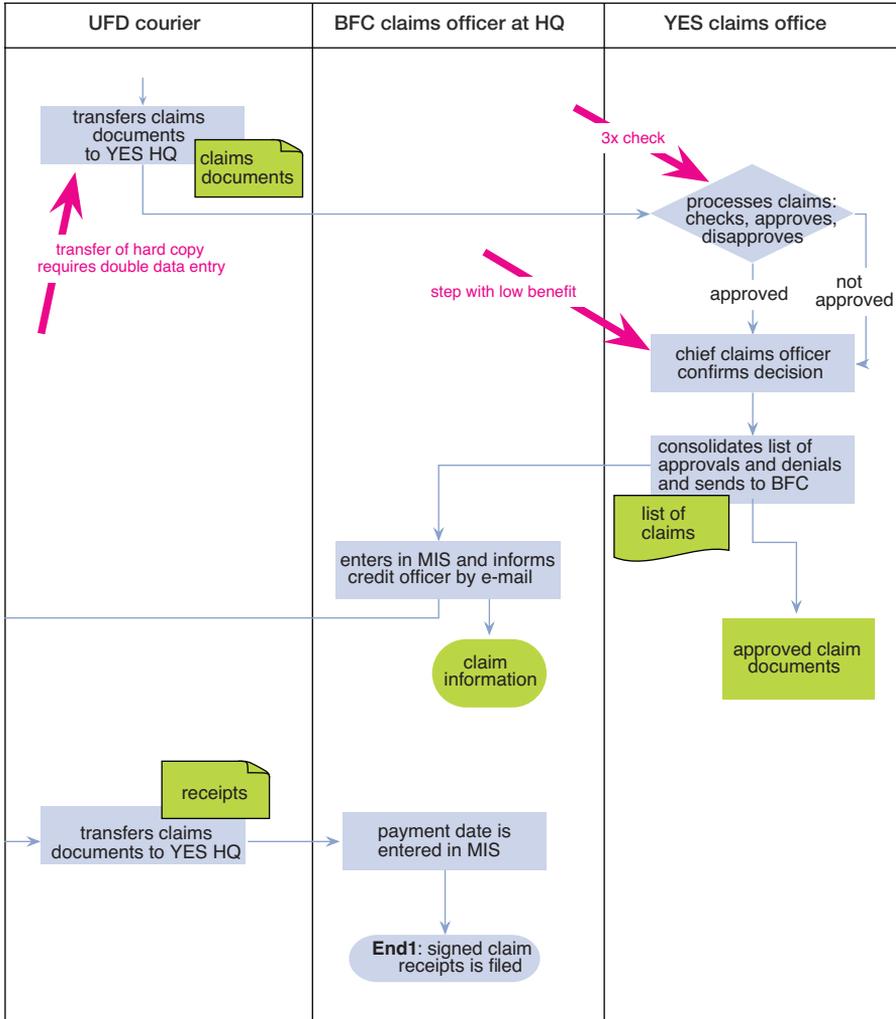


Figure 7: As-is map with bottlenecks and areas for improvement highlighted



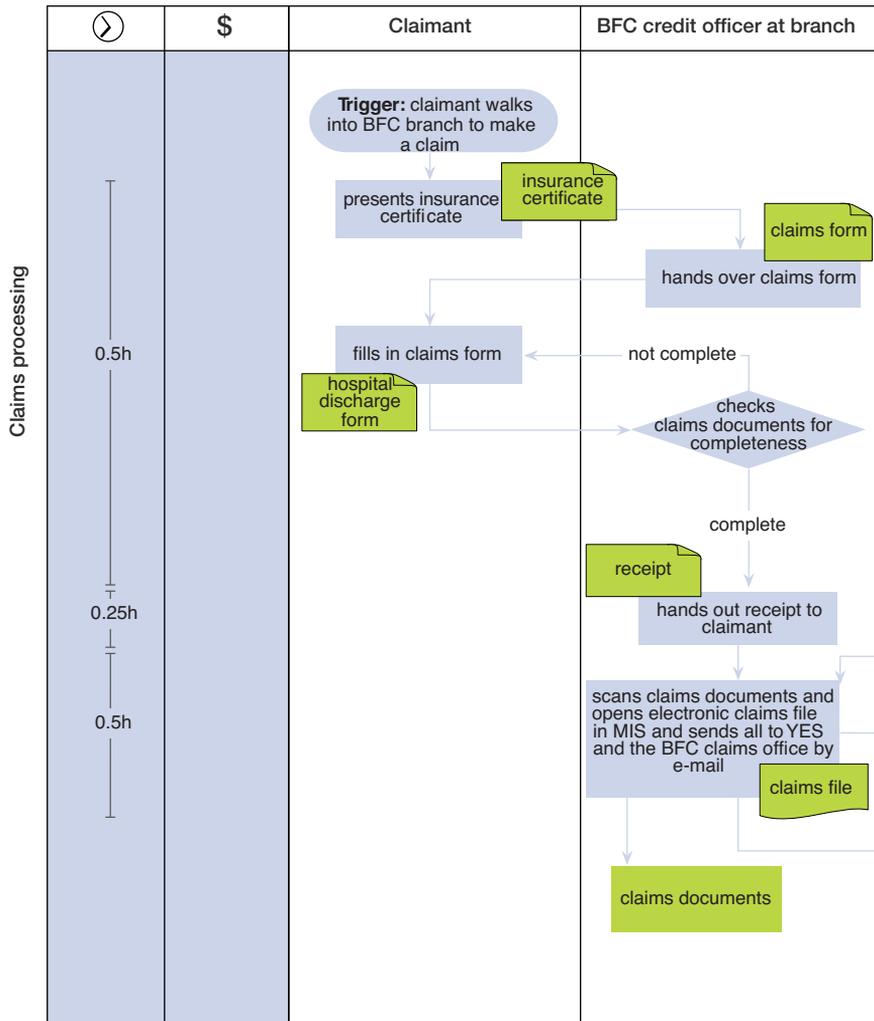
YES Hospital Cash claims process as-is map, 31 August 2009.



### Drawing the 'should-be' map

After the bottlenecks, risks and inefficiencies have been detected, the map can be transformed from an *as-is map* to a *should-be map*. It is not always obvious how to

**Figure 8: Should-be map for claims processes: YES Hospital Cash**



do this. Interviewing people involved with the processes should help you to find creative solutions. Sometimes staff from outside the process in question, such as from the training department, may come up with valuable ideas.

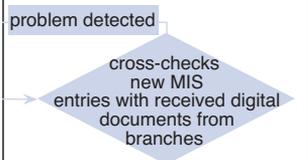
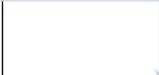
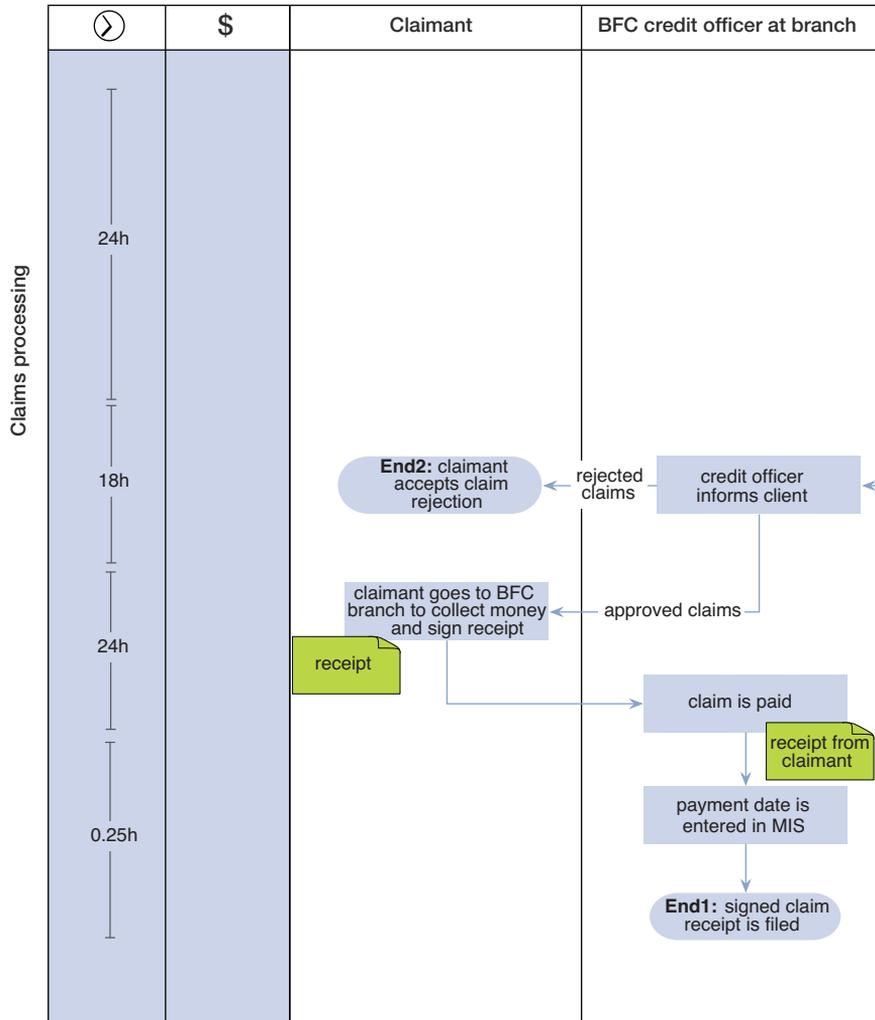
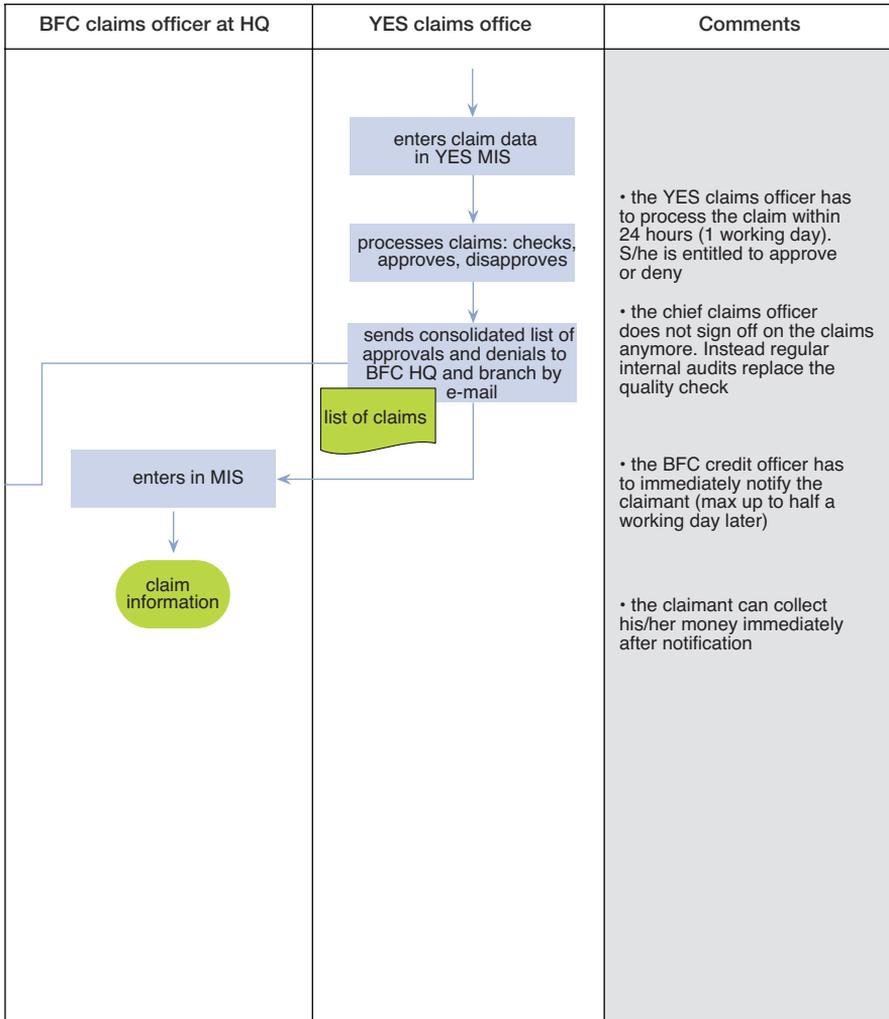
BFC claims officer at HQ	YES claims office	Comments
 <p>cross-checks new MIS entries with received digital documents from branches</p> <p>problem detected</p>		<ul style="list-style-type: none"> <li>• credit officers receive better training to reduce high rate of incomplete or not valid claims forms</li> <li>• penalties are introduced if rejection rate rises above 5 per cent</li>   <li>• scanners are provided to BFC branches</li> </ul>

Figure 8: YES Hospital Cash claims process – *should-be* map



YES Hospital Cash claims process *should-be* map, 25 September 2009.



**Box 11****The should-be map – case study: YES Hospital Cash**

After Mr Doit and Ms Bold presented their analyses of the claims process to their respective managements, the following changes were agreed to:

- Improve training for credit officers at the BFC branches and make them responsible for properly filled-in claims documents. Penalties are to be introduced if the rejection rate at YES rises above 5 per cent, and a small bonus will be paid to claims officers if it stays below 1.5 per cent. These measures will eliminate the check at BFC HQ.
- After a long discussion, BFC and YES management decided to further digitize the whole process. They agreed to buy scanners for the branch offices, which will allow the credit officers to directly enter claims data into the MIS. The service of the UFD courier becomes redundant, which substantially reduces time and potential risks, as well as costs.
- YES management agreed that the senior claims officer would no longer have to sign off on every claim. Instead, regular internal audits will ensure quality. As this step used to be a severe bottleneck, this change will speed up the process by up to a week.
- All claimants will receive receipts for submitted documents.

The measures agreed to will speed up the process considerably. Previously, claimants had to wait for at least two weeks to be paid (often much more). The original promise, as advertised, was to pay within 48 hours, which was hopelessly misleading to clients. The changed process would make it possible to meet this promise, although even here, this could only be guaranteed in cases where all process steps worked perfectly. To be on the safe side, YES decided to change their advertisement and promise payment within seven days.

## 5. Revised processes



# 5. Revised processes

## Implementation

A positive side effect of the whole process-mapping procedure – whatever the analysis and the changes – should be that the process itself has involved staff at all organizational levels. If they have the further chance to contribute their expertise, opinions and ideas to the revised process, this should greatly facilitate its implementation.

If an entirely new process is introduced or an existing one is to be changed substantially, it would be a good idea to explain these changes in a workshop with the help of the new *should-be map*. All changes and the reasons for them must be explained in detail and all staff involved should have the opportunity to ask questions.

However, even the most simple and innovative map is useless if not enough effort is put into its implementation on the ground. The following points have to be clearly communicated:

- *What*: What are the changes and for whom?
- *When*: From what point in time onwards do they have to be implemented?
- *How*: How will people be trained to implement the new processes?
- *Troubleshooting*: Who will answer questions about the new process?
- *Feedback*: How to give feedback about the new process?
- *Revision*: How long will the trial period be before a revised *should-be map* is introduced?

**Box 12****Implement changes – case study: YES Hospital Cash**

The changes decided by management would alter some staff tasks substantially. It was thus decided that team leaders should first speak with BFC claims officers, whose tasks would be considerably diminished. This proved to be no major problem, as the claims officers were overloaded with work anyway. They would now have time to take on another insurance product recently introduced by BFC.

Convincing the senior claims officer at YES proved to be harder. Although severely overloaded with work, he insisted on the importance of his signature. Only after he was shown the analysis of the process map did he agree on changing the procedure.

As the annual meeting of the BFC branch offices was just about to take place, Ms Bold organized a workshop with the staff to explain the details of the new process. In order to manage the increased workload, new staff had to be employed at larger branches. Before changing over to the new process, training was organized for the credit officers, which repeated the requirements of the claims process and introduced them to the MIS and the new scanners.

**Revision of processes**

The introduction of a *should-be* process should always begin with a pilot test. After a certain time, feedback from this test should be consolidated and the final *should-be map* can be drawn, which then becomes a reference for everyone.

Even this final *should-be map* is only temporary. All processes will continue to be regularly checked. Internal audits are an appropriate way of checking whether processes are in line with all requirements and relevant standards. Continuous monitoring of key performance indicators<sup>5</sup> will clearly help steer a microinsurance business and detect deviations early on.

<sup>5</sup> See, for example, Wipf and Garand (2010).

## Further resources

Gilbreth, F.B., and Gilbreth, L.M. 1921. *Process charts: First steps in finding the one best way to do work*. Presentation given to the annual meeting of the American Society of Mechanical Engineers (ASME), New York, 5-9 December.

McCord, M.J. 2012. *Microinsurance product development for microfinance providers*. Rome: IFAD.

Wipf, J., and D. Garand. 2010. *Performance indicators for microinsurance: A handbook for microinsurance practitioners*, 2<sup>nd</sup> ed. Luxembourg: Appui au Developpement Autonome (ADA).





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ISBN 978-92-9072-332-5



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October 2012