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The national credit bureau: A key enabler of financial infrastructure and lending in developing economies

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The national credit bureau: a key enabler of financial infrastructure and lending in developing economies

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Introduction

The challenges of lending in developing economies are unique. Across most of Africa and in some countries in Asia and Latin America the credit bureau can be a key enabler for expanding lending business, because it distributes information about the payment behavior of consumers and commercial entities. Credit bureaus

- Increase access to credit
- Support responsible lending and reduce credit losses
- Strengthen banking supervision in monitoring systemic risks.

Despite the advantages of a national credit bureau, many developing countries either do not have them at all or have low-performing bureaus with extremely limited service coverage. The impediments to establishing credit bureaus in developing countries involve several issues.

- Regulatory framework issues
- Lack of or unreliable data
- Information technology issues
- Skills and HR issues

Establishing a credit bureau from scratch in an emerging market is a multi-year program requiring a phased approach to accomplish a vision involving a number of banks and services:

- Phase 1: Diagnostic and program design. In this first phase, the extent to which the existing environment is "credit enabling" is comprehensively assessed, and the evolutionary steps are identified and defined.
- Phase 2: Credit bureau implementation. In this phase the infrastructure and main processes of the credit bureau are set up, the collection of credit information from banks is initiated, and provision of basic products is begun.
- Phase 3: Credit bureau evolution. The final ongoing phase enlarges the dataprovider base (e.g., including non-banking financial institutions, utilities and retailers), enriches credit information reports, and adds value-added services (e.g., credit rating, triggers/warnings).

Key lessons have been gathered for ensuring that the credit bureau "goes live" on time and on budget.

- Ensure strong project leadership and support from banking supervision
- Set realistic targets in order to show early results and gain momentum
- Design using accepted best-practices and focus on execution to overcome lack of implementation capabilities
- Do not underestimate data quality and information technology issues
- Plan hand-over carefully to ensure sustainability.

Lending in emerging markets: a vexed terrain

In the developing world, including most African and many Asian and Latin American countries, lending presents particular challenges. One daunting aspect of the economic terrain is its lack of adequate legal and enforcement protections. Creditor-protection and bankruptcy laws are typically inadequate, and claiming delinquent payments can be extremely difficult. Furthermore, property rights might be weakly defined, to the point where relying on property pledges as collateral for loans and mortgages becomes an iffy proposition. Yet even where existing laws are adequate, contract enforcement can be extremely complex and seizing collaterals used as guarantees for defaulted loans can have a significant cost and take a long time before credit recovery.¹

In addition to a difficult legal picture, lenders in developing countries are beset by the evenmore vexed problem of the paucity of available credit information. The lack of information sufficient to evaluate credit-worthiness is in turn the result of a lack of reliable identifiers for businesses and individuals, together with generally poor accounting practices and widespread tax evasion.

These issues, together with the fact that most developing economies have low percentages of population served by the banking system,² has stymied the development and penetration of the local credit market in many emerging economies. Individuals and small businesses alike have limited access to credit, because lenders have poor or limited financial information, and cannot offer automatic screening. Average loan volumes, furthermore, do not justify the high costs of targeted credit risk analyses.

The outlook is further clouded by low competition in credit markets, a result of banks having little or no information about new potential borrowers.³ Non-performing loans are also a problem. In developed economies, non-performing loans ratios are usually below 5 percent, but many developing economies show figures above 10 percent (Egypt, Tunisia, Ukraine, Bangladesh, Georgia, and Rwanda, et al.), with peaks rising toward 20 percent (Senegal) or even beyond 30 percent (Sierra Leone).⁴

- ² IFC estimates include Mozambique with 15 million people and 120,000 credit accounts, Angola with a population of 20 million and 200,000 credit accounts and Tanzania with an estimated 2-3 percent of the population served by the banking system.
- ³ Pinheiro, Moura, Segmentation and the Use of Information in Brazilian Credit Markets, February 2001.
- ⁴ IMF *Global Financial Stability Report*, April 2009.

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¹ Enforcing a contract in most developing countries takes one to two years and costs around 20-40% of the initial claim (*Doing Business 2009*, World Bank).

The credit bureau as a key enabler of emerging markets lending

In developing countries, lending is in large measure made possible by national credit bureaus, which perform the crucial function of gathering and distributing reliable credit information.⁵ The credit bureau collects data from a variety of sources on corporate entities or individuals, consolidates it into credit profiles, and makes the information available on request to subscribers, including financial and non-financial institutions, as well as to supervisory authorities.⁶

Reports from credit bureaus contain information about the payment behavior of consumers and commercial entities, including data on timely fulfillment of or delinquency in financial obligations. Credit officers of banks and credit organizations use this information to help decide whether to approve an application for a credit facility and what interest rates to apply. Other uses of credit information include economic analysis and systemic risk evaluation by banking regulators on supervised financial institutions.

Credit bureaus are essential elements of a country's financial infrastructure: they increase access to credit; they support responsible lending and reduce credit losses; and they strengthen banking supervision in monitoring systemic risks.

Increasing access to credit

Credit bureaus effectively reduce asymmetry in the information available to lenders, which results in reduced average rates applied and easier access to credit, thus enhancing competition.

The beneficial effects of the presence of credit bureaus on lending to small and medium-sized businesses (SMEs) and corporate lending are attested to in several studies, supported by statistical data (see Exhibit 1 on following page).

- In Eastern Europe leverage ratios are 4.2 percentage points higher in those countries where credit information sharing is more developed.⁷
- The percentage of SMEs reporting perceived financial constraints drops from 49 to 27 percent in countries with a Credit Bureau in place.⁸
- The introduction of public registries and private bureaus has raised the ratio of private credit to GDP by 7 to 8 percentage points over a 5-year horizon.⁹
- ⁵ Either in the form of a public credit registry (PCR), usually owned by the central bank, or of privately owned bureaus.
- ⁶ Particularly in case of public credit registries.
- ⁷ Brown, Martin, Tullio Jappelli, and Marco Pagano, "Information Sharing and Credit: Firm-Level Evidence from Transition Countries," CSEF Working Paper 178, 2007.
- ⁸ Data elaborated by Love and Mylenko (2003) from World Bank Business Environment survey (1999), sampling 5,000 firms in 51 countries, combined with Miller's 2003 data on the presence of credit registries in various countries around the world.





Source: Love, Mylenko, 2003; based on data of 5,000 firms in 51 countries

Likewise, studies and data support the advantages of credit bureaus for consumer lending.

- A significant rise in the amount of consumer credit granted relative to GDP has been measured in economies where a credit bureau is present.¹⁰
- Credit bureaus help borrowers build reputational collaterals and more bargaining power for the terms of credit.¹¹

Supporting responsible lending and reducing credit losses

Credit bureaus can effectively reduce default ratios through a set of combined effects. *Visible credit histories* permit the appropriate lending activity. Where potential borrowers are overextended (existing debt, credit lines with other banks, repayment difficulties, etc.), lenders can avoid clients that may be unable to repay; lenders can conversely identify clients with good credit profiles, and potentially increase lending offers.

Credit bureaus work as enforcement tools, pushing clients to repay their debt in order to avoid being included in the list of bad debtors. Credit bureaus can also help reduce fraud by

- ⁹ Djankov, McLiesh, Shleifer, *Private Credit in 129 Countries*, March 2006.
- ¹⁰ Jappelli and Pagano, Information Sharing, Lending and Defaults: Cross-Country Evidence, 1999
- ¹¹ Developing Credit Reporting in Africa: Opportunities and Challenges, IFC, November 2007

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providing positive identity checks, verifying personal details (date of birth, address, or name of parents, etc.).

Several examples of the overall positive impact of credit bureaus across diverse developing economies can be cited:

- NPL ratios were reduced from 6.67 to 4.52 percent in banks in Shanghai at the end 2002, one year after the launch of the local credit bureau.¹²
- Arrears rates declined by 2 percent in Guatemala 6 months after the introduction of a national Credit Bureau.¹³
- A study conducted in Argentina in 2004 highlights that with a target loan approval rate of 40 percent, default rates can drop by 79 percent in smaller financial institutions.¹⁴ (See also Exhibit 2.)

Exhibit 2 The effect of credit bureaus on default rates – Argentina example



Not surprisingly, credit bureaus provide a better information base to be used during the credit recovery process, thus increasing the probabilities of recovering payments on defaulted loans.

¹² Shanghai Municipality, 2003.

- ¹³ Luoto, McIntosh, Wydick, Credit Information Systems in Less-Developed Countries, September 2004.
- ¹⁴ Powell et al., *Improving Credit Information, Bank Regulation and Supervision*, November 2004.

Strengthening banking supervision in monitoring systemic risks

Credit bureaus collect historical data that then become available to central banks' supervision departments for monitoring and preventing systemic risk. Credit bureau-collected data becomes a reliable aid to the performance of the following risk-monitoring functions.

- Support the estimation of appropriate capital and provisioning requirements for supervised institutions
- Monitor risk concentration
- Monitor financial institution use of credit reports in lending practices
- Monitor level of consumer indebtedness as a key indicator of the risk of a consumer credit crisis
- Assess evolution of credit risk at specific sector/industry/geographic level
- Ascertain relative reliability of banks' assessment of credit risk by performing comparisons between the "status" (performing vs. non performing) reported for borrowers who are served by multiple banks.

Credit Bureaus in developing and emerging economies

Many developing economies still have no credit reporting system in place, or the coverage of current services is extremely limited.¹⁵

- Several Eastern European countries have no credit information available to lenders (Albania, Belarus, Latvia, Moldova, Montenegro, Slovenia, Ukraine); those with a credit bureau in place have coverage rates of the adult population of below 30 percent, except for Croatia (72.4 percent), Poland (51.5 percent) and Serbia (51.3 percent).
- The same situation is present in sub-Saharan Africa countries:
 - Ghana, Lesotho, Nigeria¹⁶ and Uganda have no credit information available
 - Senegal, Gabon, Kenya, Mozambique and Rwanda have coverage percentages below 5 percent.
- Latin America shows a slightly broader coverage, but levels are still far from those in the United States and Western Europe.
 - Venezuela has practically no coverage
 - Paraguay, Brazil, Ecuador, Panama, Colombia, Chile, Peru, Bolivia and Guatemala all show coverage rates below 50 percent.

¹⁵ Data elaborated from IMF *DoingBusiness 2008* indicator tables, pp. 94-96.

¹⁶ The Nigerian Credit Bureau is expected to start delivering services during the second half of 2009.

The depressed credit reporting situation may be partially explained by a number of contextspecific challenges that make setting up a credit bureau especially complex in developing economies.

- Regulatory framework issues. Many emerging countries lack specific legislation on credit reporting and other aspects of the necessary legal framework are not clearly defined, including laws concerning data privacy and data protection law, as well as credit-granting provisions. Another scenario involves strong regulatory constraints preventing or limiting effective data sharing, thus creating an obstacle to proper credit bureau functioning. This scenario has been observed in Uzbekistan and Slovakia.
- Lack of data or unreliable data. A number of issues affect data quality in developing economies. There are both structural problems and bad credit-granting practices. Among the data issues observed are: lack of unique identifiers (e.g., chamber of commerce numbers for businesses or social security numbers for individuals); lack of location identifiers (e.g., street names and building numbering); unavailability of key credit information (e.g., date of credit facility granting or contract expiry); and poor data quality of available information (e.g., errors in data entry).
- Information technology issues. Different IT-related constraints prevent the smooth establishment of a credit bureau. Among the IT issues observed are: the very lack of a core banking system, which prevents centralized data collection; weak IT infrastructure within banks (absence of e-mail system, branches not connected to headquarters, etc.); basic IT commodities not available or not reliable (e.g. unstable power supply; slow or unreliable Internet connections); hardware and software provisioning issues (e.g., limited availability of hardware brands and models, software import barriers); lack of experienced service providers for infrastructure setup and maintenance and lack of local presence of vendors for hardware and software support.
- Skills and human resource issues. Recruiting experienced and skilled staff can be extremely difficult in developing economies. Workforce issues observed include a lack of persons qualified with basic credit and IT skills, project management experience, execution capabilities, and knowledge of English.

These issues can make setting up a credit bureau in an emerging country an extremely challenging task, which could take 5 or more years from initial discussions to issuance of the first credit report.¹⁷

Setting up a national credit bureau: addressing the key issues

McKinsey's on-the-ground experience has taught us that an end-to-end approach is optimal for the development of national credit bureaus in emerging economies. The long-term vision should be to build up a large data provider base, including non-banking financial institutions, utilities, and retailers, so that comprehensive credit information reports about commercial and consumer exposures can be provided to subscribers.

¹⁷ IFC, Credit Bureau Knowledge Guide, 2006

A key success factor in establishing a credit bureau is to ensure the availability and reliability of the data. The careful planning and implementation required to do this has been broken down into five separate design areas (Exhibit 3).

Exhibit 3 Establishing a national credit bureau: key success factors and design areas



The separation in five distinct design areas allow the parallel execution of five workstreams, each supporting the key success factors:

- Regulatory environment and legal structure. This workstream is aimed at ensuring that legislation is in place to enable effective credit information sharing.
- HR and organization. This workstream is aimed at setting up the future credit bureau organization and ensuring proper staffing.
- Processes and procedures. This workstream focuses on the definition of Credit Bureau operating model, including the creation of internal and external operating processes and procedures documentation.
- Technology and interfaces. This workstream is aimed at ensuring that the needed IT infrastructure and architecture is in place and its interfaces with external systems are properly set up.
- Data acquisition. This workstream focuses on creating the data acquisition and quality processes, so that the appropriate data is gathered, cleansed and enriched prior to the launch of the credit bureau.

Establishing a credit bureau from scratch in an emerging market is a multi-year program requiring a phased approach to accomplish a vision involving a number of banks and services.

- Phase 1: Diagnostic and program design. In this first phase, the extent to which the existing environment is "credit enabling" is comprehensively assessed, and the evolutionary steps are identified and defined.
- Phase 2: Credit bureau implementation. In this phase, the infrastructure and main processes of the credit bureau are set up, the collection of credit information from banks is initiated, and provision of basic products is begun.
- Phase 3: Credit Bureau evolution. The final ongoing phase enlarges the dataprovider base (e.g., including non-banking financial institutions, utilities and retailers), enriches credit information reports and adds value-added services (e.g., credit rating, triggers/warnings).

Phase 1: Diagnostic and program design

The goal of the initial diagnostic phase is to perform a comprehensive assessment of the "credit-enabling" environment, including assessment of data availability in banks and of current operating processes and systems (Exhibit 4).

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Exhibit 4

Diagnostic and program design - key activities and timeline

		fi Qi		
Areas	Key activities	M1	M2	M3
Regulatory environment and legal structure	 Analyze current country-wide information systems (shareholding structure, mission, objectives, etc.) Analyze legal/regulatory requirements for risk management 			
Organization, HR, and training	 Analyze current organization and HR structure of current credit info systems Identify what skills are readily available in the labor market 	[
Processes and procedures	 Map internal processes of existing credit registries and the like Analyze the interaction between credit providers and such registries 			
Technology and interfaces	 Select solution provider Analyze existing IT infrastructure Define requirements for interfaces with core banking systems Select other technology partners 			
Data acquisition	 Identify potential data sources and assess how much data is available Carry out prelim. data quality analysis Identify likely unique customer IDs 			

As an example, a diagnostic of the regulatory environment and legal structure should be performed, according to the following main questions:

- Do current data privacy, data protection and banking secrecy laws allow effective information sharing? Do any laws in other areas appertain to information sharing and if so, should they be taken into account?
- If a current credit registry exists, what if any regulatory framework governs it? Would the new credit bureau be likewise governed, or would there be additional or different requirements?
- What are the current share-holding structure, mission and objectives of existing registries (e.g., public vs. private), if any?
- Is subject consent required for credit data collection? If yes, how does it work (tacit, informed, etc.)?
- To what uses can retrieved credit information be legitimately put?
- Do self-inquiry and dispute resolution processes exist? How do they work?

Once the existing environment has been assessed, the program design phase will shape how the credit bureau will operate and how effective its services are going to be. Key shaping questions are given below.

- Shall the credit bureau be a public credit registry or a private company?
 - If private, what is the most suitable ownership structure? commercial and owned by creditors? non-commercial and owned by a creditors' association? other?
 - If public what kind of reporting line should the credit bureau organization use for departmental supervision department?
- What is the aspiration for changes of the legal framework governing credit bureau operations (e.g., minimal requirements, good practice, best practice)? Which regulations are critically important to ensuring the proper functioning of the credit bureau?
- What method should the bureau use for going live with participating banks? Should the central bank force supervised institutions to join the bureau? Should the principle of reciprocity be invoked or should credit information be available to also to non-participating institutions (those not providing their own data)?
- Should the central bank discontinue providing credit registry services (if any) until the go-live date of the new credit bureau?

Each question within the five workstreams requires a detailed analysis of viable design options, a deep understanding how each option will impact the viability and performance of the credit bureau (as well as the banking system as a whole), and a compelling discussion with all stakeholders in order to ensure proper buy-in, support and commitment during the implementation phase.

The main deliverables of the diagnostic and program design phase are a detailed description of implementation requirements for each design area and a master work plan.

Phase 2: Credit bureau implementation

The main challenge in the implementation phase are issues relating to developing economies briefly highlighted earlier in this document, such as the lack of reliable systems and data and

the scarcity of experienced and skilled staff. In order to be effective and meet the deadlines, a pragmatic approach to implementation is often preferable to traditional methods.

An example of the traditional approach, data acquisition workstreams traditionally rely heavily on automated data extraction from existing systems, as described in Exhibit 5.

	Timing	Potential benefits	End product
Data analysis	1-2 months	 The credit bureau and commercial bank teams review the bank's existing data to understand which data fields have already been collected Results are published in a gap analysis Central bank will then mandate collection of the missing data More attractive product offering for private credit bureau 	 Data gap analysis
Data collection and audit	3-6 months	 The banks collect the required data and credit bureau team will audit collection process each month for 3 months After each audit, results will be distributed to the project committees 	Data collection circular letterData collection audit report
Interface develop- ment	1-3 months	 After understanding the bank's existing data, bank IT will design interfaces for submitting data in the file format required by the credit bureau and develop the data acquisition tool 	 Connection between bank and credit bureau
Data extraction	1 month	 After establishing complete data collection, the technical consultant and both the credit bureau and commercial bank teams will extract data from the banks to the credit bureau data base 	 Loan data migrated to credit bureau

Exhibit 5 Traditional approach for data extraction

In many developing economies this approach might be not viable for the following reasons.

- Collection of consumer and commercial credit information entails the gathering of approximately 200 data fields per credit facility (credit facility data, client profile, collaterals and guarantors, etc.), which might have different definitions based on the products they refer to (letters of credit, letters of guarantee, commercial loans, overdrafts, mortgages, etc.).
- In developing economies, these data might be not readily available:
 - Information may be stored in paper format only, thus requiring manual retrieval from paper folders
 - Information may be stored in legacy systems without functionalities for data extraction in standard formats
 - Project management capabilities within banks for designing and running data extraction from legacy systems may also be lacking.

Due to these constraints, a more pragmatic, top-down approach may be required, as described in Exhibit 6 on the following page.

Exhibit 6 Top-down approach for data extraction

		Timing	Potential benefits	End product
	Explore	1-2 months	 Get list of all data sources for all banks (both electronic and paper) Quickly analyze data availability and quality of the sources Define a data migration policy based on a costbenefit analysis for inclusion of various amounts of data Design a pragmatic data acquisition approach 	 Overview of systems and data landscapes Data migration policy
	Plan	1 Month	 Develop generic plan and set overall deadlines Tailor plan to each bank and agree on plan with them Identify and make available resources for project teams in each bank 	 Detailed data acquisition plan (both overall and for each bank) Project teams set up in banks
Execute	4-6 months	 Execute detailed plan from previous phase Put in place necessary tools (e.g., data collection forms, data entry tool, manuals explaining the tools) Agree on detailed targets, preferably weekly, for data collection and entry; track progress carefully against targets Check and promote data quality 	 High-quality data available in electronic format 	

A further complication may arise when banks do not yet have a core banking system (CBS) in place, which forces the use of a temporary solution in the execution phase briefly described in Exhibit 6. In these cases, a staged data acquisition process is required to allow manual data collection of existing credit facility stock before CBS adoption.

Overall it can thus be necessary to design creative and pragmatic solutions, with a constant focus on execution, in order to assure a timely and successful "go-live" launch.

Phase 3: Credit bureau evolution

The new credit bureau is likely to provide initially basic services only, gather data from a limited number of data providers or on a limited number of subject (e.g., large corporate only). These and other limitations are typically introduced during the design phase in order to balance the length and breadth of credit bureau coverage and the initial product set with the amount of time needed from initial concept to the official launch.

After the go-live launch, a comprehensive evolution plan for the credit bureau needs to be elaborated, along the development direction highlighted in Exhibit 7 on the following page.

Exhibit 7 Directions in credit bureau evolution

	Examples	Potential benefits	Challenges	
Introduction of value-added services	 Credit rating Consolidated reports (across holding/subsidiary companies) Triggers/warnings Reports on industry sectors, geographic areas, specific banks 	 Improved credit management across banks More attractive product offering for private credit bureau 	 Increased risk of being held liable for information provided Processing capacity required 	
Addition of member institutions	 Both as data providers and service users Financial institutions* Utility companies Large retailers As service users only: Government institutions 	 More comprehensive credit data available Improved granting and management of credit in institutions other than banks 	 Appropriate access rights and consent rules to safeguard privacy and data security 	
Inclusion of more customer segments	 Individuals SMEs Midsize and large corporate NGOs Government departments Charities Not-for-profit organizations 	 Improved credit granting and management for larger set of customers 	 More demanding data collection requirements for member institutions Systems support (e.g., interfaces) required to facilitate data capture and submission 	

* Other than banks

The plan for the evolution of the credit bureau shall be based on well defined priorities that take into account the context-specific issues analyzed during the design phase. Typical examples of issues preventing or limiting possible evolution scenarios include.

- Weak credit underwriting processes within banks, which would make credit rating products not useful.
- Absence of core banking systems, which would make impossible to collect data on consumer credit (number of loans unsuitable for manual data entry).

The development of value-added services is especially important for credit bureaus, to support more advanced risk management capabilities and higher-value data for subscribers. The availability of detailed data on existing credit facilities (e.g., value of assets mortgaged, client blacklist, defaults and recovered amounts, write-offs) and of additional information not directly related with open credit lines (e.g., frauds, bounced checks/direct debits, criminal convictions) would allow enhanced predictive power of risk management models, better decision making by banks and more accurate credit pricing.

Key lessons from real credit bureau implementations in developing countries

A number of lessons from real credit bureau implementations in developing economies This section highlights a number of key lessons learned, which can be taken into account in order to ensure the system go-live on time and on budget:

- Ensure strong project leadership and support from banking supervision
- Set realistic targets in order to show early results and gain momentum
- Design using accepted best-practices and focus on execution to overcome lack of implementation capabilities
- Do not underestimate data quality and information technology issues
- Plan carefully hand-over to ensure sustainability.

Ensure strong project leadership and support from banking supervision

During the design phase several decisions have to be taken requiring input from a number of different stakeholders within the central bank. Ensuring a strong and committed project leadership as well as a clear buy-in of all involved parties is essential to translate the design into practical actions, in order to avoid political deadlocks. For example, to amend banking law to include additional data reporting requirements or specify penalties for delays in data submission could become drawn-out processes if the central bank's senior leadership does not personally commit to making it happen.

Given the context, and the strong influence the supervision department of the central bank can exert on the credit bureau project, it is highly recommended to include the supervisory head on the project leadership team, perhaps as head of the steering committee.

Set realistic targets to show early results and gain momentum

Targets should be challenging, but realistic. Reaching early targets is important, to show results quickly and gain momentum both within the project team and with internal and external stakeholders (e.g., pilot member banks). This approach would also allow the team to assess the context-specific issues influencing the implementation phase in a shorter timeframe, which would benefit the entire project.

Realizable targets can be crafted in the following ways (among others).

- By limiting data coverage to business credit only or to credit facilities with amounts over a certain threshold;
- By focusing data collection on a subset of fields considered critical;
- By offer credit information reports only with no additional value-added products.

These limitations can be overcome later on, during the credit bureau evolution phase, with extensions prioritized based on the experience gained during the implementation phase.

Base design on accepted best practices and focus on execution to bridge gaps in implementation capabilities

Credit products offered by financial institutions in developing economies are typically standard and not sophisticated; similarly, the information needed by credit officers during credit underwriting phase is typically limited to standard data available in credit information reports.

On the other hand, capabilities of most local staff are limited, delegation skills are poor and willingness to make decisions is generally low, all of which can have serious impact on overall project execution.

For these reasons, the project team should be pragmatic during the design phase, leveraging known best practices whenever possible and avoiding "nice to have" customizations. The extra effort should instead be refocused on project execution, through a highly structured approach, detailed planning and strong hands-on involvement in each project phase from the beginning.

Close monitoring of all suppliers and local client teams is mandatory in order to avoid unnecessary delays. Execution should be constantly tracked by the project leadership as well, by means of frequent steering committees and tight reporting requirements.

Do not underestimate data quality and information technology issues

Data acquisition will likely be the most challenging and time-consuming workstream, as data availability and quality might very low in many developing economies' financial institutions. As a consequence, the migration approach has to be chosen carefully, data cleansing and enrichment activities must be planned from the beginning, and delays built in due to manual data entry(where core banking systems are not in place).

Similarly, setting up the IT infrastructure in a developing country may require much more time than it would in a developed one. Provisioning delays and the scarcity of experienced IT staff on the local market, will no doubt make it difficult to build the internal IT team and to select a reliable vendor to support the team during systems setup and integration.

Data collection and IT-related activities should nonetheless be started as soon as possible (earlier than would be necessary in other environments) and tight deadlines set to create a buffer of time against expected delays.

Plan carefully hand-over to ensure sustainability

Due to a general lack of skills and capabilities and the consequent direct involvement of the project team in daily operating tasks, the hand-over of credit bureau operational activities to the local team must be carefully planned.

The hand-over plan should include at least the following items:

- Operating processes and procedure
- Software operations, administration and maintenance
- Operations of the data center infrastructure

Full ownership of credit bureau evolution initiatives.

A fair and open assessment of local team capabilities might highlight the need of external temporary managers to be added to the staff for a limited amount of time (6 to 12 months) in order to allow the team to take full ownership of all critical aspects.

Credit bureaus are essential elements in the financial infrastructures of developed economies. For developing economies, credit bureaus are a *sine qua non* for expansion and growth. They allow increased access to credit, support responsible lending, reduce credit losses and strengthen banking supervision capabilities in monitoring systemic risks.

McKinsey has developed a solid and pragmatic approach for setting up credit bureaus in emerging countries, allowing smooth project execution within a short amount of time, encompassing design, implementation, launch, and the ensuring of credit bureau sustainability over time.

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