DevInfo
Facts. You decide.
The challenge in monitoring human development initiatives is to accommodate diverse approaches in monitoring. They vary in terms of the population covered, scope of study, and periodicity of collecting information. Population censuses are comprehensive and provide a wealth of social and economic information for the entire population. They are done once every decade. Surveys are conducted more frequently than censuses. However, they often target a sample of respondents and focus on specific topics such as health or education. Routine data from administrative records provide data on a frequent basis but there are problems in both access and data quality. Apart from all these sources, there are reports by international agencies such as the Human Development Report and the State of World's Children Report. These reports focus on key themes and are usually published annually.
Another challenge is with respect to data quality. Data is subject to interpretation by experts. The estimates, correction factors and opinions by statisticians vary, resulting in different data values for the same phenomenon. There are many languages used in producing and distributing data. Such diversity leads to complexity in calculating and comparing data over time and between regions.
There is a challenge in terms of the diversity of the audience. Diversity exists in terms of agencies involved in monitoring human development, as well as the end users of the monitoring information. Member States are both producers and users of data. National statistics organizations, government planners and members of civil society are all examples of this diversity. Then there is a broad range of UN agencies, each with their own focus areas. We also have many development agencies, both bilateral and multilateral, each with their own priorities.
The challenge is to promote data use and foster debate for social policy formulation. This requires a strong emphasis on turning human development statistics into strategic information for decision making. An opportunity to meet this challenge is to leverage the work of UN Country Teams to assist national authorities with an assistance framework for strategic information management.
Over the years, DevInfo has crossed many important milestones. It started in the 1990s as ChildInfo, a database system used by UNICEF to monitor the World Summit for Children.

In 2002, UNICEF offered ChildInfo to the UN system as a database system model for monitoring the MDGs.

In April 2004 DevInfo 4.0 was launched with endorsement by the United Nations Development Group.

In April 2006, DevInfo 5.0 was launched with options for use of the system on both desktops and the internet.
DevInfo employs state-of-the-art technology and is available both as a stand alone and on the internet. Its distribution is royalty-free, making it accessible to a broad range of users. DevInfo is endorsed by United Nations to be used by Member States to monitoring human development. It is designed to help monitor the Millennium Development Goals and other national plans of action.
DevInfo is compliant with emerging international standards and thus resolves data quality issues.

ISO-compliant metadata makes it possible to compare data across international settings.

It uses the SDMX standard for storing metadata on indicators.

Metadata on data sources is compliant with the Data Documentation Initiative standard.

DevInfo allows incorporating data from standard statistical applications. These applications are commonly used for analyzing data sources from censuses and household surveys.

DevInfo can import data from existing database systems using XML for data interchange.
More than 5000 professionals have been trained in the use of DevInfo through efforts supported by the United Nations and Member States.
More than 80 national statistics organizations and other agencies have adapted DevInfo database technology to meet their specific requirements.
Here is an example of a national adaptation owned by Cambodia which has ten schemes for monitoring human development indicators, some international and some country-specific.
One of the important new features of DevInfo 5.0 is that it is deployed on both desktops and the internet. DevInfo is distributed royalty-free. The system belongs to the United Nations.
Here is a system diagram of DevInfo. There are two software applications: DevInfo User Interface and DevInfo Database Administration.
Indicators are organized by sectors, goals, themes and other methods.
DevInfo generates three types of presentations: tables...
Graphs...
Panel with themes, layers, features, insets

And maps.
A unique feature of DevInfo is the support to view a time series of maps.
The new Map Wizard allows you to add map insets and raster images from satellite maps.
DevInfo is integrated with this raster mapping application.
Here we see the DevInfo thematic map overlaid on the raster map.
You can zoom in to see sub-national areas (where data exist).
DevInfo is being used to monitor the MDGs. The official UN Statistics Division MDG monitoring data are disseminated in DevInfo format.
The MDG Info 2006 database was distributed at the UN General Assembly (Sep 2006) with the UN’s 2006 progress report on MDGs.
In many countries, DevInfo is being used by the UN Country Team to create a UN Common Database under the UN Development Assistance Framework. This database is fine-tuned to address national development priorities and to monitor strategic development indicators, such as MDGs, PRSP, etc. The database is used by UN agencies to monitor specific areas of interest.
This approach can be used to integrate the UN Country Team’s efforts to harmonize UN country programming. For example, UNICEF has adapted DevInfo to monitor its corporate Medium Term Strategic Plan. MTSP Info tracks UNICEF’s corporate commitment to children and its contribution to the overall development process through the MDGs.
MTSP Info tracks UNICEF’s five focus areas mapped to the MDGs. The system also monitors five groups of key performance indicators.
The first step in creating MTSP Info was to gather all official United Nations information about the 48 MDG indicators and the metadata describing these indicators. These 48 indicator names were transformed key families using ISO-standardized code lists for the names of the indicators, the units of measurement and associated subgroups (sex, location, age group).

Note: The ISO standardization methods follow the UN-recommended SDMX compliant formats for data and metadata exchange.
Then this list of MDG indicators was augmented with MTSP indicators.
Each Focus Area has a set of SMART indicators: Specific, Measurable, Achievable, Realistic and Timely.
Here is the MTSP Info customized framework organized by UNICEF’s five focus areas.
Each of the Focus Areas contains a set of key indicators.
These indicators are also linked to the MDGs.
The MTSP indicators are also linked to public and private sector partners.
Here is another example of a customized framework linked to indicators for UNDAF.
Indicators are linked to the strategic monitoring framework. There are an unlimited number of branches in the classification tree.
DevInfo is being used to monitor aid effectiveness.

The UN system is involved in thousands of development projects with over 160 Member States. In the past, the UN’s monitoring systems could not easily answer these types of questions related to MDGs.
The UN’s Integrated Package of Services provides a framework for provision of the UN’s primary MDG-based development services. This presentation shows how DevInfo can be used to build a monitoring framework to monitor and measure the UN’s development efforts according to global, regional and national plans and strategies.
This presentation shows how the MDG monitoring framework can use DevInfo to link MDG indicator data with UN country-level MDG efforts and resources. A
One approach for mapping UN efforts to MDGs is to link UN Atlas project information to the DevInfo MDG Goal – Target classification tree at the country level. This would provide detailed granularity for MDG mapping and would link national MDG data to national MDG objectives. This is a key advantage in advocating for this MDG Monitoring Framework at the national level as it will allow for analysis of the breakdown of the provision of efforts and resources at the level required for national level planning. This approach would map each country-level project to country-level MDGs. This mapping exercise would assign Projects (as Indicators) to Goals, Time Periods and Areas (Country). Each Project would be further defined in the DevInfo definition of Indicators with a Unit (USD) and subgroup (budget, commitment, expenditure). It would also require the development of a standardized method to map projects which may not logically fit in the context of the 8 MDG goals (for example, the use of an MDG 0 Goal for issues related to de-mining, governance, capacity building, etc.).
DevInfo can be used to produce graphs to compare UN expenditures by MDGs between countries.
DevInfo can be used to produce graphs to compare UN expenditures by MDGs within a country. As reported by UNDP, the comparative data obtained from the initial test of three pilot countries would need to be analysed on the basis of an individual country’s local definition for each MDG and its performance towards achieving each MDG target. Thus, the mechanism for linking UNDP’s expenses related to each MDG to the country’s situation should be elaborated, taking into consideration the fact that MDG Goals and Targets defined at the country level can significantly differ from the MDG Goals and Targets defined at the global level.
The United Nations responds to more than 300 disasters around the world every year. Experience has proven that managing information is always a key challenge for people managing responses to emergency situations.

EmergencyInfo is a powerful decision support system, based on DevInfo database technology that helps people to respond better in emergency situations. It combines the advanced data access and presentation features of DevInfo with new data capture technologies. EmergencyInfo helps to bridge information gaps within the first few hours of an emergency and provide support for rapid data collection, situation assessment, standard monitoring reports and disaster preparedness. EmergencyInfo database utilities help analyse the data from multiple dimensions and identify key information to formulate more effective response strategies. With a few clicks, the information can be presented as tables, graphs and maps for dissemination in standardized situation reports.
EmergencyInfo helps bridge the information gap in the event of an emergency. Rapid assessment forms have been created to capture data within the first 72 hours of an emergency.
The rapid assessment forms are formatted for data collection on PDA with one question per page. Questions are formatted for responses with radio buttons, drop-down combos, check boxes and text boxes.
Rapid assessment forms are created and edited using the EmergencyInfo Form Generator. The form generator provides methods to handle conditional questions and calculated values.
The form generator creates forms in XML format for use on PDA memory cards.

<table>
<thead>
<tr>
<th>Form</th>
<th>Section</th>
<th>Question</th>
<th>Answer Type</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Q1</td>
<td>What are the key features of a form generator?</td>
<td>Text</td>
<td>5</td>
</tr>
<tr>
<td>2</td>
<td>Q2</td>
<td>How does the form generator work?</td>
<td>Text</td>
<td>4</td>
</tr>
<tr>
<td>3</td>
<td>Q3</td>
<td>What is the output format of the form generator?</td>
<td>XML</td>
<td>4</td>
</tr>
</tbody>
</table>

Memory Card
The form generator creates forms in XML format for use on PDA memory cards.
PDAs are used to capture data using the rapid assessment forms. These forms can be deployed in multiple languages. The built-in PDA calendar fills in the time automatically while the built-in GPS automatically records the latitude and longitude.
Data can also be captured through web-based surveys using the same XML forms. The system imports data captured in XML format into a DevInfo database.
Then the DevInfo database is used to create situation reports with tables, graphs and maps. Reports can be requested from the database by SMS.
EmergencyInfo technology was piloted in four tsunami-affected countries: India, Indonesia, Maldives and Sri Lanka.
The mapping features have been enhanced in EmergencyInfo to provide support for a method to analyze affected populations by geospatial estimations using buffering. The new maps also provides for visualization of more than one variable at once to facilitate the analysis of resources against problems. In addition to colors and patterns, thematic maps can be rendered by dot-density. The system supports the mapping of facilities (schools, health facilities), infrastructure (roads) and topographical features (rivers, elevation) so that in emergencies information can be easily and rapidly accessed and analyzed.
UNSIC is extending the usefulness of the DevInfo database system to address the issue of tracking avian and human influenza. The system is being used to implement a comprehensive unified monitoring and reporting strategy for the UN system. The database contains key indicators on prevention, preparedness, response and control.
EmergencyInfo is being used to strengthen the collection and use of indicators for the Core Commitments for Children in Emergencies (CCCs). The system is being integrated into government and UN mechanisms to identify a common list of indicators to be monitored for emergency and response.
In Liberia, an inter-agency strategy is being piloted for the implementation of DevInfo database technology in the transition from emergency relief to development. The strategy is to leverage MDG-based information needs to move forward rapidly with tools for improved monitoring of national development priorities.
In summary, DevInfo provides a cross sectoral repository for strategic information on human development. The system can be easily adapted to country specifications. The database contains both global and user-defined indicators. These indicators can be linked to global and user-defined goals. DevInfo promotes the dissemination of data for effective advocacy and timely decision support. You are invited to visit www.devinfo.org for more information about DevInfo.