Royal Holloway, University of London
Management Information Reporting Framework

MI Reporting is defined as follows:

Good management information (MI) makes it possible for decision makers at all levels to more easily access, understand, analyse and act on information. By combining data and insight MI reporting provides knowledge and information, often in a visually accessible way, to users at a suitable level.

A. Vision:

The aim of this framework is to develop our capabilities, processes and systems so that we can deliver robust and timely information in a secure manner. This information will enable the University to:

- Understand our position within the HE environment and respond to changes and opportunities
- Understand how we are performing in relation to the objectives set out in our strategic plan
- Provide the Departments and Professional Service areas with information that enables them to deliver an excellent student experience
- Provide the Departments and Professional Service areas with information that enables them to create an environment that supports and enhances our research culture
- Provide information to users to enable them to deliver efficient and effective professional services

B. Context

The MI Reporting framework comes from several key drivers within and without the institution:

1. Increased data needs – more people require more targeted and useful data and they need it more often on more devices

2. Reporting technology developments – existing reporting technology as implemented at RHUL can be time-consuming and is focused on data manipulation rather than data visualisation. New technology and improvements to existing technology can enhance reporting in ways we should take advantage of

3. Changes in the sector – within the HE sector, data and its use are becoming key to more than just strategic planning. HEFCE, HESA, UCAS and other statutory bodies are developing their data analysis capabilities to respond to this and we should follow suit. In addition, the Higher Education Data and Information Improvement Programme (HEDIIP) brings to the fore the information provision for HE that was highlighted in this white paper - Students at the Heart of the System – (June 2011)*.

C. Principles

1. Reporting Principles

The College’s approach to Management Information reporting will be focused on meeting the information requirements of users and enabling functional areas to undertake the reporting for which they are responsible. Our principles are:

- To develop a shared set of definitions for data and business rules
- To adopt an approach and systems that are flexible and allow us to report on internal, external and combined datasets
- To ensure that appropriate governance, data retention, confidentiality and security is in place and that we are compliant with data protection and other relevant legislation
- To enable self-service for users where appropriate
- To ensure that confidential data is treated appropriately for staff and students and that the appropriate groups are consulted on these issues where relevant

2. Data Principles

Data underpins all our reporting and there are several key principles around our use of data:

- To ensure that our data is as accurate, complete and timely as possible
- To ensure that we collect as much data as is required, relevant and useable and no more than that
- To ensure that we treat our data with respect, upholding confidentiality, data security and at the same time maintaining appropriate access to relevant users
- To govern our data with care and consideration, making decisions around the strategic use of data with transparency and accountability
- To ensure that our data assets are mapped, accessible, secure and owned
- To establish a Master Data Management and Reporting Group (MDMRG) that will be responsible for overseeing our data use, our reporting landscape and our compliance with legal requirements
- To develop our management of data as an asset to the college so that we use it appropriately by sharing it where relevant, protecting it when necessary and continually improving it

It is recommended that a data management policy also be developed in alignment with this framework.
D. Reporting Approach

This framework outlines our approach to reporting as follows:

1. Reporting at Royal Holloway – what reporting do we do and who does it?
2. Management Information Reporting – what type of reporting does this cover?
3. Reporting Methods – how do we undertake reporting?
4. Master Data Management and Reporting Group – how will we undertake quality assurance of our data and reporting?
5. Prioritisation – how will we determine what to report on?
6. Access – how will we ensure the Management Information is disseminated?
7. Monitoring – how will we keep track of the framework as it is implemented and ultimately reviewed?
8. The future and the HE Sector

1. Reporting at Royal Holloway

Reporting at RHUL has the following categories:

a. Operational Reporting

This is reporting done within a particular section or area and used only within that section or area for the day to day running of the section (e.g. Infoview reports used by Student Records to monitor online sign-up). It may be used to make operational decisions (e.g. whether to contact students who have not yet signed up) but is generally not considered management information since these decisions are tactical rather than strategic and do not usually impact outside of the section itself.

Operational reporting is therefore something each section undertakes of its own accord and not something covered by this framework. Where there are considerable reporting requirements within a section there may be specific staff whose role is to undertake that reporting (e.g. Data Management report on Student Data).

b. Information released to the public in accordance with legislation

Reporting to comply with legislation such as Freedom of Information (FOI), Data Protection (DP), Environmental Impact Reporting (EIR) and reports to the Office of the Independent Adjudicator (OIA) will be undertaken by the relevant sections. These are all overseen by the College Secretary’s office. Licensing reporting (e.g. Copyright licensing, Performing Rights Society etc.) reporting would be also be overseen by the College Secretary’s office to which any queries should be directed.

c. Statutory Reporting

Where we are required to make statutory returns to funding bodies or other agencies or organisations, these are undertaken by the section with responsibility for the data concerned (e.g. Finance make the HESA Finance return, Data Management make the HESA Student return). Statutory reports are overseen by Finance, Strategic Planning and Change, HR and Estates and signed off by the Principal or Deputy Principal.
d. Service level monitoring

The college provides a range of services to students, staff and others. Professional Services are responsible for monitoring the quality of these services to ensure that they are optimising performance and delivering agreed service levels.

e. Management Information Reporting

This is the area of reporting broadly covered by this framework in the next section. The definition of MI reporting is outlined at the start of this framework.

2. Management Information Reporting

We will be reporting at these levels:

- Key Performance Indicators (KPIs)
- Performance Indicators (PIs)
- Strategic Planning
- Information Provision

1. High level KPI reporting – each individual KPI from the College Strategy is monitored and progress measured against the target on an annual basis. KPI reporting falls into the following themes and reporting areas:

- Student recruitment
- Student achievement and engagement (current and historic)
- Student employability
- Research performance
- People and culture
- Financial and environmental sustainability

These strategic objectives will be reported on by bringing together data and information from across the college into one place. Reporting can be focused on individual systems and areas which makes strategic reporting complex and time-consuming. Our strategic reporting will be undertaken across those systems, across sections and focusing on the data and what it can show us. Reporting in this way will enable us to answer questions about our performance under the main strategic themes.

It is the responsibility of the Strategic Planning and Change team to provide these reports since they address questions of strategic significance within the college. This team is not aligned to any one section, team, system or department and therefore can provide a balanced approach to reporting across all different groups.
2. **Medium level Performance Indicator (PI) reporting** – to support the monitoring of the KPIs and to meet reporting needs at a lower level. These PIs may be considered as ‘proxies’ for the KPIs, in particular where KPI reporting is annual. This reporting will be undertaken as follows:

   a. A set of PIs should be identified for the relevant KPI and strategic objectives detailed in the College Strategy in collaboration with –

      i. Departments/services that contribute to the achievement of the KPI

      ii. Department/service that undertakes the reporting

   b. Outlining details of how frequently reporting is done

   c. Detailing the methods of reporting e.g. solutions used, method of delivery, teams reporting etc.

   d. Answering the following questions:

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>How will it be measured?</td>
<td>Which metrics, which data sources, what populations? (e.g. external data, internal data etc.)</td>
</tr>
<tr>
<td>Who will measure it?</td>
<td>Which teams are responsible for monitoring our progress against target for this KPI?</td>
</tr>
<tr>
<td>How frequently will it be measured?</td>
<td>Can this be provided frequently? Does it make sense to have it more or less often?</td>
</tr>
<tr>
<td>How will it be reported?</td>
<td>Dashboard? PowerPoint? Excel?</td>
</tr>
<tr>
<td>Who will report it?</td>
<td>Which team(s) are responsible for reporting on it? (It may not be the same as those who measure it).</td>
</tr>
<tr>
<td>How frequently will it be reported?</td>
<td>Even if the figures are annual, should they be reconsidered quarterly?</td>
</tr>
<tr>
<td>To whom will it be reported?</td>
<td>Which managers need this information?</td>
</tr>
<tr>
<td>Who will be responsible for achieving the target?</td>
<td>Who takes overall responsibility for coordinating efforts to achieve the target monitored by this indicator?</td>
</tr>
<tr>
<td>What technical solutions are required?</td>
<td>Even if the report is within a basic tool (e.g. Excel) its production may require further manipulation in more technically complex solutions.</td>
</tr>
<tr>
<td>What sector benchmarks are to be used?</td>
<td>Where applicable</td>
</tr>
</tbody>
</table>

As with the KPIs there are several key areas of reporting that are the focus of these indicators. The aim is to use the data we have to answer questions in each strategic area. Questions like ‘Do we provide the same value for money for all students regardless of subject?’

- Student recruitment
- Student achievement and engagement (current and historic)
- Student employability
- Research performance
- People and culture
- Financial and environmental sustainability
3. Management Information for Strategic Planning

Basic MI reporting can provide useful information to a range of people. However, it cannot substitute the work that comes from skilled and experienced analysts providing insight. Therefore, Strategic Planning and Change will continue to provide a bespoke analytical service in collaboration with the functional area(s) concerned.

a. Management Information for Annual Planning

This is reporting that supports the annual planning round for departments and professional services through the provision of MI (e.g. Departmental Profiles). This type of planning is focussed on things that are known and certain or very likely. For example, student number targets for the next year are set during the planning round, supported by the provision of information on previous year’s performance against earlier targets – information supplied in the Department Profile.

b. Market Intelligence

The Annual Planning round is the culmination of a range of other planning processes. These earlier phases of planning consider ideas for the future that are opportunities (e.g. creating new departments), or potential threats (e.g. changes to student tuition fee regimes) or that come about through monitoring of the KPIs, PIs or other MI reporting (e.g. Annual Review). These earlier phases of planning will also be supported by the provision of Management Information. These can be considered as Market Intelligence since they all involve considering the sector and the wider environment when developing ideas.

Analysis of the market can support planning for the future in several ways. By benchmarking our performance against our peers we can not only monitor our progress but we can also see in which direction the sector is moving. For example this may help us plan changes to improve student experience.

Some examples:

- Analysis of the NSS, DHLE and other survey results to identify actions for improvement
- Analysis of the League tables
- Analysis of the programmes on offer at other institutions
- Analysis of the REF data across the sector.

Planning for the future also includes considering what new things to do within our organisation – for example whether to introduce a new system to manage our accommodation, the introduction of a new subject area or department, or whether to update our HR system. Management Information will be provided to support Business Cases as they are put forward for consideration by providing robust, timely and relevant evidence about the sector and the internal environment.

Some examples:

- Analysis of the impact of changing entry requirements on offer making for new applicants
- Analysis of Law provision in the sector to assess the feasibility of a School of Law
- Scenario planning for a range of outcomes in anticipation of changes to government policy
4. Information Provision of basic statistics

This means the publication of a standardised set of information on the web, produced by Strategic Planning and Change, which will provide users with at-a-glance figures. This will be as interactive as possible depending on the available solutions. In addition, reports on students will be available from Data Management on request, Student Systems and Student Records will provide and maintain reports that support business processes.

3. Reporting Methods

Reporting needs to be available, accessible, appropriate, accurate and complete. Our KPIs capture the key strategic objectives we have set ourselves as a University. Medium Level PIs are those that individual sections (e.g. Finance, Student Records etc.) are responsible for monitoring but which are determined by the Senior Management Team. These are proxies for the main Strategic KPIs of the college and are ways of monitoring in more detail the variables and issues underlying the KPIs – for example, the main KPI of recruiting up to 1500 more students by 2020 could be monitored by a medium level PI to achieve certain targets in each department in each individual year. This would be monitored through the Admissions dashboard.

The different types of reporting will be undertaken as follows:

<table>
<thead>
<tr>
<th>Reporting</th>
<th>Method</th>
<th>Outcomes</th>
<th>Governance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operational Reporting</td>
<td>As appropriate</td>
<td>Within operational section</td>
<td>Within operational section</td>
</tr>
<tr>
<td>Information published in accordance with legislation</td>
<td>As appropriate</td>
<td>Reports/information provided to requester / agency</td>
<td>College Secretary</td>
</tr>
<tr>
<td>Statutory reporting</td>
<td>As appropriate</td>
<td>Data supplied to statutory requester</td>
<td>SP&amp;C/Principal</td>
</tr>
<tr>
<td>KPIs</td>
<td>Annual monitoring through presentations and website updates</td>
<td>KPIs are assigned to specific individuals who are responsible for achieving them</td>
<td>PRC/Council</td>
</tr>
<tr>
<td>Medium level PI reporting</td>
<td>Dashboards where applicable, at least annual monitoring if not more frequently</td>
<td>Medium level PIs assigned to specific people responsible for achieving them</td>
<td>MDMRG (see below)</td>
</tr>
<tr>
<td>Annual Planning</td>
<td>Annual reporting through various means (Dashboards, Excel, PowerPoint) to support planning processes</td>
<td>Use of reports within Planning round to provide evidence for plans.</td>
<td>SP&amp;C</td>
</tr>
<tr>
<td>Market Intelligence</td>
<td>Ad hoc reporting. Strategic reporting requests from committees. Delivered through bespoke methods</td>
<td>Pre-annual planning support and in-year tactical planning.</td>
<td>SP&amp;C</td>
</tr>
<tr>
<td>Information Provision</td>
<td>Dashboards and ad hoc request submissions, basic facts and figures on our website.</td>
<td>Ad hoc requests monitored and transferred to dashboards where applicable</td>
<td>MDMRG (see below)</td>
</tr>
<tr>
<td>Service level monitoring</td>
<td>As appropriate</td>
<td>Monitoring of service levels</td>
<td>Registrar</td>
</tr>
</tbody>
</table>

Where applicable, the provenance of a report will be given to show from what sources the data has been taken. The detail of this will depend on the level of the information concerned.
4. Master Data Management and Reporting Group

To ensure our data is fit for purpose within reports, we need governance to assure senior managers that the quality is suitable to meet our needs and that we are maintaining and storing our data in appropriate ways. The Master Data Management and Reporting Group (MDMRG) undertake this quality assurance role as follows:

1. Act as quality assurance that the framework is being implemented correctly

2. Ensure that maximum value is gained from our data assets – i.e. to make sure we are using the data we have to understand our college and monitor its performance

3. Ensure that data is handled securely, appropriately and accurately

4. Be 'reporting champions' within their respective areas to support report producers and report users

5. Oversee any development within the college of data warehouses, college-wide reporting tools etc.

6. Assign data ownership to particular systems, sections and individuals (where appropriate).

A key focus of the group will be on making decisions around data and in particular answering questions like:

- Who owns this data?
- Who can access this data?
- Which systems can access this data?
- Which system is definitive for this data, which system holds the source of truth for this data?

The MDMRG will report to SPMPC and will escalate decisions to that committee where necessary. The MDMRG will develop its terms of reference and membership in collaboration with SPMPC.
5. Prioritisation

Reporting should be undertaken to cover all our strategic objectives, to enable strategic planning and to provide information to users. Where new reporting is required this will be prioritised according to the following measures:

- the strategic impact of the proposed reporting,
- the quality of existing reporting and
- the scheduling issues of the reporting need.

<table>
<thead>
<tr>
<th>Measure</th>
<th>Detail</th>
<th>Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strategic Impact</td>
<td>How important is this piece of work for the institution?</td>
<td>High</td>
<td>Fundamental to College Success</td>
</tr>
<tr>
<td></td>
<td>Does it meet the strategic aims?</td>
<td>Medium</td>
<td>Important but not critical to college success</td>
</tr>
<tr>
<td></td>
<td>Will it help decision makers monitor/analyse and/or act?</td>
<td>Low</td>
<td>Nice to have</td>
</tr>
<tr>
<td>State of existing reporting</td>
<td>Does existing reporting meet the needs of the report users/the college?</td>
<td>High</td>
<td>Existing reporting is very high quality and/or very efficient and/or low risk</td>
</tr>
<tr>
<td></td>
<td>Is existing reporting risky or inefficient?</td>
<td>Satisfactory</td>
<td>Existing reporting is good quality and/or efficient and/or medium risk.</td>
</tr>
<tr>
<td></td>
<td>Or is there currently no reporting at all?</td>
<td>Unsatisfactory</td>
<td>Existing reporting is low quality and/or inefficient and/or high risk or does not exist at all</td>
</tr>
<tr>
<td>Scheduling</td>
<td>Is existing reporting about to change due to an upgrade or change to a system?</td>
<td>Short term</td>
<td>New reporting can be developed now</td>
</tr>
<tr>
<td></td>
<td>Is any proposed change dependent on any pre-requisites?</td>
<td>Medium term</td>
<td>New reporting can be developed soon but there are some pre-requisites or dependencies</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Long term</td>
<td>New reporting must be developed later since there are many pre-requisites or dependencies</td>
</tr>
</tbody>
</table>

New reporting areas with the highest strategic impact where the state of current reporting is unsatisfactory that can be scheduled in the short term will be undertaken first.
6. Access

Reporting should be accessible to all appropriate users and there is an online ‘Reporting Hub’ for those seeking reports. This will:

1. Present the user with immediate access to standard reports that provide basic information e.g. college statistics.

2. Present the user with links to access particular reporting areas (e.g. Students, Applicants, Research etc.) either through a link to the dashboards webpage, or through downloadable spreadsheets, or through providing the functionality necessary to request specific reports.

The above would be organised into sections within the Reporting Hub so that users can either find what they want by KPI, PI or by the broad reporting themes (Students, Applicants etc.). The aim is to make the searching and accessing of information as easy as possible.

7. Monitoring

In order to ensure that the framework is working and to maintain an ongoing understanding of the requirements of report users, the following monitoring will be undertaken:

1. Use made of reports –
   This will include the monitoring of how frequently reports are accessed, the number of users, the number of problems raised etc. This will form the basis of plans for ongoing reporting developments, support, maintenance and training.

2. Report requests
   Bespoke reporting will be monitored continually for the purpose of developing new self-service options. For example, if several similar requests are received, these could become a scheduled report.

8. The Future and the HE Sector

Given the rapid pace of change within the sector, reporting needs to be at least at the same pace of change if not trying to actively predict what might be coming. For example, the potential changes in tuition fees, the decreasing numbers of postgraduate applicants, and the risks to overseas students from the changes in government policy.

Reporting currently is focussed on looking at the current and previous position of the college. The exception is scenario modelling where analysts consider the impact of a decision within what is currently known. More of this needs to be undertaken since the best Management Information is that which provides evidence to make decisions – i.e. it should help us answer the question, what do we do next?