



**Higher Education Realisation of Benefits  
interactive (HERBi) tool**

**User Guide**

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## **1. Introduction**

The HERBi tool allows users to explore the nature and scale of the potential quantitative and qualitative costs and benefits associated with sharing services within the higher education sector.

It has been developed by Falmouth Exeter Plus, which is the shared services delivery partner of Falmouth University and the University of Exeter, with support from the Higher Education Funding Council for England.

Falmouth Exeter Plus provides a broad range of services on the Falmouth Campus and on the shared Penryn Campus in Cornwall. These range from library and academic skills, information technology and student support to estates, accommodation and all retail services. Falmouth Exeter Plus is owned jointly by the two universities and has its own senior management team and staff.

The HERBi tool draws extensively on the experience of Falmouth Exeter Plus, as well as on research into other shared services arrangements in the higher education sector and beyond.

This short guide gives users of the HERBi tool an overview of what the tool is for, how it works and how it can be used. While the tool itself is fairly self-explanatory from the user's perspective, this guide provides users with more detailed information on the data, parameters and calculations involved.

## **2. Creating and managing a HERBi account**

Users of the HERBi tool are provided with the option to set up their own free user account. This will allow users to:

- create and name new sessions within the tool;
- save current sessions, including partially completed sessions;
- load and update previously-completed sessions;
- create a new session on the basis of an existing one; and
- review a list of previously saved sessions associated with their account.

The creation of a user account requires input of the user's email address and of a password suggested by the user. In the event of a lost or forgotten password, users are able to reset their password via email notification.

Users are also able to use the tool as a 'guest', i.e. without creating or logging into an account. Guest users will not, however, be able to save or to return to their sessions,

## **3. About the HERBi tool**

The tool asks users to input cost and cost driver data about their own institution, the service(s) that they would like to share and the institution(s) with which they would like to share them. If users do not have specific partners in mind, they can select from a number of generic institutions within the tool.

The model underlying the tool represents a simplified version of reality. Consequently, it is based on a number of assumptions, which include:

- that the costs of the service(s) that users wish to share behave broadly in line with the parameters set out within the model;
- that the nature and scope of the service(s) delivered under the shared arrangement will be broadly similar in nature and scope to those delivered currently by the user's institution; and
- that the delivery of services will be standardised across all partners in the shared services arrangement.

The nature and scale of the potential costs and benefits outlined within the tool should be regarded as indicative and should not be relied on without further investigation. Users are advised to take suitable professional advice and to undertake appropriate project appraisal and due diligence before entering into any shared services arrangement.

#### **4. The scenarios included within the tool**

The tool is based around three specific shared services scenarios, which are designed to cover the majority of arrangements likely to be considered by users.

These scenarios are as follows:

**Scenario 1:** The user's institution seeks to share its own services with other institutions;

**Scenario 2:** The user's institution wishes to share another institution's services; and

**Scenario 3:** The user's institution intends to work with other institutions to set up a new, separate shared services organisation.

#### **5. Services and institutions**

The tool incorporates those services that institutions are most likely to want to share with other organisations. Where relevant, the tool also breaks these services down into a range of individual activities.

The services included within the tool are as follows:

- admissions, registry and student administration;
- residences, retail and other campus services;
- library services;
- student support services;
- financial services;
- human resources;
- ICT services;
- estates and facilities; and
- conferences and events.

The parameters used within the tool in respect of each individual service and activity have been tailored to that service or activity. The tool does not seek, however, to define each service or activity too precisely. The main thing is that, when using the tool, users should define services and activities consistently across the participating institutions.

## 6. About the proposed shared services arrangement

The first element of the tool collects information about the nature of the proposed shared services arrangement. The data collected here is used in various places within the tool to define key parameters and to estimate the likely costs and benefits of the arrangement to the participating institutions.

The information collected here includes:

- the number of institutions within the shared services arrangement;
- the services that are to be shared; and
- whether the arrangement will constitute a VAT cost-sharing group<sup>1</sup>.

This element of the tool also collects information on the institutions involved in the proposed shared services arrangement.

The tool assumes that, as a minimum, users will be able to input high level cost and cost driver data for their own institution. If users have this information available for other participating institutions, then this can also be input.

Where users do not have this information for their proposed partners, though, or where they do not yet have specific partners in mind, the model offers a range of alternatives. For each participating institution, users can select from the following options:

- a generic institution about the same size as their own;
- a generic institution about X times LARGER than their own (where X is a factor input by the user); and
- a generic institution about Y times SMALLER than their own (where Y is a factor input by the user).

These options replicate the user's own institution's cost and cost driver data, adjusted linearly – where relevant – to reflect the scaling factor(s) input by the user.

Users are also asked at this stage to estimate the likely complexity of the governance arrangements for the proposed shared services operation and to provide some high level information in respect of staffing arrangements and of the participating institutions' existing financing costs.

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<sup>1</sup> See the HEFCE guidance on cost-sharing groups at <http://www.hefce.ac.uk/funding/efficient/ss/>.

## 7. Service delivery costs and savings

For each service to be shared, the tool asks users to input their institution's existing annual income and costs relating to the delivery of these services. The income and cost categories used within the tool are:

- **operating income** - annual income generated through delivery of the service, such as accommodation fees, library fines and retail sales;
- **staff costs** - the annual salary cost of staff involved in the delivery of the service, including on-costs;
- **cost of sales** - the annual cost of any items sold to staff, students or other customers as part of the delivery of the service, such as food, drinks or retail items;
- **other operating expenses** - the annual total of any other expenses incurred in the delivery of the services;
- **depreciation<sup>2</sup>** - the charge recorded in the institution's financial statements in respect of the annual cost of capital assets used in the delivery of the service, such as vehicles, buildings and infrastructure equipment; and
- **interest and other finance costs** - the annual cost of borrowing funds used to finance the delivery of the service or the purchase of assets used in its delivery.

As outlined above, users may also input relevant cost data for other proposed partners within the shared services arrangement, if they have this data available.

The model underlying the tool uses the parameters contained within it for each of the services to be shared, together with the cost and cost driver data input by the user, to estimate the cost of each service under the proposed shared services arrangement.

The model does this by estimating the proportion of costs within each service that are fixed and the proportion of costs that vary in line within a pre-determined cost driver. The model then 'uplifts' the variable element of the costs to reflect the higher volume of activity under the shared services arrangement.

The specific costs used depend on the nature of the shared services arrangement:

- Scenario 1 uses the user's institution's fixed and variable costs and uplifts the variable costs to take account of the higher volume of activity;
- Scenario 2 uses a specific partner institution's fixed and variable costs and uplifts the variable costs to take account of the higher volume of activity; and
- Scenario 3 takes an average of the fixed and variable costs of all partners and uplifts the variable costs to take account of the higher volume of activity.

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<sup>2</sup> Depreciation is used here as a proxy for the cost of capital tied up in fixed assets.

The tool also asks users how they would like the projected cost of the new shared services arrangement to be shared across the partner institutions. These costs can be shared equally across partners or on the basis of various cost drivers.

By comparing the projected cost of the shared services arrangement for each partner institution with the institutions' existing service costs, the tool is able to estimate the potential cost savings for each institution participating in the arrangement.

## **8. Value added tax (VAT)**

Where the proposed shared services arrangement is to constitute a VAT cost-sharing group, no VAT charge will be included within the model underlying the tool. However, where it is anticipated that the arrangement will not constitute a VAT cost-sharing group, the model will add an appropriate VAT charge (using a VAT rate of 20%) to all participating institutions other than the one providing the services.

## **9. Economies of scale**

The tool takes into account that if a shared services arrangement is purchasing goods or services at a greater volume than was previously being purchased by any of the participant institutions individually, it may be able to purchase these at a lower cost per unit.

To do this, the tool identifies the total cost of sales and other operating expenditure incurred by each institution in respect of the services to be shared. It then compares the average of these costs with the total projected costs of sales and other operating expenditure for the proposed shared services arrangement.

Based on the percentage increase between average existing expenditure and projected shared expenditure, the tool applies an indicative economy of scale, in the form of a percentage reduction in the shared costs.

The parameters built into the model are as follows.

<b>Increase greater than...</b>	<b>Economy of scale applied</b>
25%	2.5%
50%	5.0%
75%	7.5%
100%	10.0%

## **10. Efficiency savings**

The tool also factors in the potential for efficiency that can be associated with the development of shared services arrangements. This stems from the fact that, as organisations standardise and redesign their services in preparation for sharing, they tend also to make them more efficient.

Within the model underlying the tool, the level of potential efficiency savings is determined by the user's assessment of the efficiency of the existing services within each institution participating in the shared services arrangement.

Because it is difficult to assess the efficiency of a service, the tool asks users to identify – as a proxy for actual efficiency – when each service was last subject to some kind of efficiency or business process review, using the following categorisation:

- Efficient: Business process review in last three years;
- Could be improved: Business process review over three years ago; and
- Not efficient: No business process review in the last five years.

An efficiency cost saving is then applied to the projected cost of each service to be shared, using the following parameters:

Efficiency categorisation	Efficiency saving applied
Efficient: Business process review in last three years	0%
Could be improved: Business process review over three years ago	5%
Not efficient: No business process review in the last five years	10%

## 11. Staff costs savings

Where staff operating within a shared services arrangement fall outside the single pay framework for the higher education sector, it is possible that staff cost savings may be achieved. This is dependent on the pay scale agreed for these members of staff and how it compares with the single pay framework.

To ensure that any potential staff cost savings are identified and considered, the tool asks users to confirm whether staff involved in the delivery of the shared services arrangement will operate outside the single pay framework.

Where the user states that staff will operate within the single pay framework, then no adjustment to staff costs is made. However, where the user confirms that staff will operate outside the single pay framework, the model applies an appropriate cost saving (using an in-built assumption of an 8% saving) to the projected staff costs for the shared services arrangement.

## 12. Financing cost savings

By working within a shared services arrangement, participating institutions may be able to achieve financing cost savings by borrowing money at a reduced interest rate. This may be the case, especially, if one of the participating institutions is significantly larger than the others.

In order to estimate the potential savings, the tool asks users to input the interest rates at which participating institutions are currently able to borrow money. It then identifies the lowest rate paid by participating institutions and determines the average variance of the interest rates paid by the other participating institutions above this lowest rate.

The tool then uses this average variance to estimate the potential financing cost savings within the shared services arrangement.

### **13. Governance costs**

Any shared services arrangement is likely to generate additional governance costs for the institutions involved. The nature and extent of these costs will depend on the complexity of the shared services arrangement, with more complex arrangements generating higher governance costs.

Within the tool, users are asked to estimate the complexity of the necessary governance arrangements as low, medium or high. The tool then converts this assessment to a numerical 'complexity factor' for each level of complexity (1, 1.5 and 2.5 respectively) and applies it to a series of governance costs already built into the model.

In addition to the governance costs within the shared services arrangement, participating institutions will also incur their own costs of oversight and monitoring of the arrangement. These costs are included within the model underlying the tool as a percentage (set at 20% per participating institution) of the governance costs outlined above.

### **14. Set-up costs and savings**

As well as the ongoing costs and savings outlined so far, shared service arrangements will incur a range of initial one-off costs. They may also yield one-off savings.

The tool includes the following categories of initial costs and savings:

- set-up costs;
- staff-related costs;
- construction of new buildings / facilities;
- purchase / development of new IT systems;
- other initial / one-off costs; and
- one-off savings.

The tool estimates set-up costs for the shared services arrangement (to cover project management, consultancy and legal costs) on the basis of the number of partners and the number of services to be shared. It also allows users to input additional set-up costs as required.

Where the creation of the shared services arrangement will result in a reduction in staffing levels (which is almost inevitable if significant cost savings are to be achieved), the tool asks users to determine whether these will be achieved through redundancies or through natural staff turnover.

Where the former is the case, the tool estimates the cost of such redundancies by multiplying the projected annual reduction in staff costs by a suitable factor, which is set in the model at 50%. The tool also allows users to input other staff-related costs, such as any legal costs relating to staff transfers and costs relating to staff training.

Users are able to input any costs relating to the construction of new facilities, the purchase of new IT systems and any other initial costs. They are also able to input any one-off savings, such as those realised through the sale of surplus assets or buildings.

## 15. Factoring in the time value of money

Within the tool, it is recognised that cost savings will not be realised instantly in the first year of the proposed shared services arrangement. Consequently, all savings are introduced in a linear fashion over a number of years, as follows:

<b>Saving</b>	<b>Introduced over...</b>
Service delivery savings	4 years
Economies of scale	4 years
Efficiency savings	4 years
Staff cost savings – Natural staff turnover	5 years
Staff cost savings – Redundancies	2 years
Financing cost savings	5 years

In order to be as prudent as possible, governance costs are recognised in full in year 1 of the shared services arrangement.

Initial one-off costs and savings are recognised over the first three years as follows:

<b>Initial one-off cost / saving</b>	<b>Year 0</b>	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>
Set-up costs	50%	50%	0%	0%
Staff redundancy costs – Natural staff turnover	n/a	n/a	n/a	n/a
Staff redundancy costs – Redundancies	50%	50%	0%	0%
Other staff-related costs	50%	50%	0%	0%
Construction of new buildings / facilities	50%	40%	10%	0%
Purchase / Development of new IT systems	50%	50%	0%	0%
Other initial / one-off costs	50%	40%	10%	0%
One-off savings	0%	20%	30%	50%

Using this information, the model underlying the tool is able to calculate the net present value of the net savings resulting from the proposed shared services arrangement over a fifteen year period. The discount factor used within the model is 3.5%.

## 16. Qualitative benefits and risks

In addition to the quantitative costs and benefits of the proposed shared services arrangement, as outlined above, the tool seeks to explore the qualitative benefits and risks that such an arrangement might yield.

Within the model underlying the tool, a number of potential qualitative benefits and risks have been identified.

The likely impact of these benefits and risks within the proposed shared services arrangement is assessed as high, medium or low. This assessment is undertaken by considering relevant drivers within the model, together with pre-determined parameters for each of these factors.

The qualitative benefits and risks considered within the model, together with the drivers that determine their impact, are as follows.

<b>Benefit / Risk</b>	<b>Impact driver</b>
<i>Strategic Benefits</i>	
Frees up organisational time to focus on strategic activities	Fixed for each scenario
Opportunity to undertake development projects that would not otherwise be viable	Average increase in turnover
<i>Operational Benefits</i>	
Access to knowledge and experience of other institutions	Number of partners
Improved challenge and scrutiny	Fixed for each scenario
Improved resilience of service(s)	Fixed for each scenario
<i>Benefits for Staff</i>	
Access to greater range of staff resources, e.g. training	Number of partners
Increased diversity of staff population	Increase in number of staff
Improved staff satisfaction	Increase in number of staff
<i>Benefits for Students</i>	
Increased diversity of student population	Increase in number of students
Improved level of service to students	Fixed for each scenario
Improved student satisfaction	Number of services
Improved student retention	Number of services

Benefit / Risk	Impact driver
<i>Risks</i>	
Potential staff and/or union concerns around pay and conditions	If staff will be outside single pay framework
Potential staff and/or union concerns around redundancies	How staff savings will be achieved
Perceived lack of accountability to students	Fixed for each scenario
Shared services arrangement may not be familiar to third party providers	Fixed for each scenario
Initial disruption to service delivery	Number of partners x Number of services
Potential loss of key members of staff	How staff savings will be achieved

## 17. Presenting the results

Users who have registered an account within the tool and logged into it can save their session and return to it at a later date. Users also have the option of exporting the results of each session in a range of formats or of printing these results for future reference.

The results of the analysis are presented within the tool as follows:

### ***Overview of savings***

A high level overview of the annual savings achieved by the individual participating institutions and overall, comparing the institutions' existing costs with those that could be achieved under the shared services arrangement.

The current and estimated shared costs for each participating institution are also expressed as a cost per student, cost per staff member and cost per combined staff and student numbers.

### ***Net present value of costs and savings***

The net present value of the estimated savings from the proposed shared services arrangement, for each of the participating institutions, over fifteen years.

### ***Breakdown of costs and savings***

A detailed breakdown, for each participating institution and overall, of the various costs and savings included within the model underlying the tool.

The costs and savings are broken down as follows:

#### ***Recurrent savings***

- Service delivery savings
  - Admissions, registry and student administration
  - Campus services

- Library services
- Student support services
- Financial services
- Human resources
- ICT services
- Estates services
- Conferences and events
- Economies of scale
- Efficiency savings
- Staff cost savings
- Financing cost savings

*Recurrent costs*

- Governance costs
- Value added tax

*One-off costs and savings*

- Set-up costs
- Staff-related costs
- Construction of new buildings / facilities
- Purchase / Development of new IT systems
- Other initial / one-off costs
- One-off savings

***Qualitative benefits and risks***

The different qualitative benefits and risks identified within the model, together with the assessed impact of each of these benefits and risks for the proposed shared services arrangement.

**18. Questions and feedback**

We hope that you will find the tool useful and that it helps you to understand the potential costs and savings associated with the sharing of services.

Should you have any queries or comments about the tool, please contact:

**herbi@fxplus.ac.uk**

*The HERBi tool has been developed by Falmouth Exeter Plus with funding and support from the Higher Education Funding Council for England (HEFCE).*

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