

Library Use and Return On Investment: A Case Study of HKIEd Library

Francis Chan
HKIEd Library

JULAC Libraries Forum
24 April 2015

Return On Investment (ROI)

- Return on Investment is an accounting ratio expressing the profit as a percentage of the investment.
- In the Library circle, ROI is often expressed as a simple ratio as in a Cost Benefit Analysis (Kelly, Hamasu and Jones, 2012)

$$\frac{\text{Value of benefits}}{\text{Total cost to produce benefits}} = B : C$$

ROI for Academic Libraries

- Key Question – how do you translate the use of Library to a dollar value for the calculation of ROI for an Academic Library?
- Different approaches have been used:
 - Contingent-valuation approach (e.g. Griffiths, King, Tomer, Lynch, & Harrington, 2004; Library Research Service, 2007, Kingma & McClure, 2015)
 - Income generation approach – grants obtained that could be attributed to use of Library resources (Luther, 2008; Tenopir, 2010)

The Library Value Calculation by Cornell University Library

<http://research.library.cornell.edu/value>

- Application of the contingent-value approach to the [Library Value Calculator](#) (popular among public libraries) without conducting the user survey
- It asks a very simple question: if the Cornell University Library did not exist, how much would the University have to pay in order to secure services that are comparable to the Cornell Community's use of the University Library?

HKIEd Lib ROI

Calculation (2013/14 data) (1)

(A) Use of Physical Volumes	
Initial Loans	265,569
Book loans obtained via ILL	11,909
Assuming each loan is worth 50% of the book cost = $(265,569 + 11,909) \times 50\%$	138,739
Average book price in 2013/14 for HKIEd Lib	HK\$353
Aggregated Value (A) = $138,739 \times \text{HK\$}353$	HK\$48,974,867

HKIEd Lib ROI

Calculation (2013/14 data) (2)

(B) Use of Electronic Books	
COUNTER-BR2 Usage (Note: e-books from COUNTER-compliant platforms only represent 36.3% of all HKIEd e-books)	473,667
Physical-Loan-equivalent figures (assuming one physical loan = 3 BR2 usage) = $473,667 \div 3$	157,889
Assuming each loan is worth 50% of the book cost = $157,889 \times 50\%$	78,944.5
Average book price in 2013/14 for HKIEd Lib	HK\$353
Aggregated Value (B) = $78,944.5 \times \text{HK\$}353$	HK\$27,867,409

HKIEd Lib ROI

Calculation (2013/14 data) (3)

(C) Use of Journal Articles	
COUNTER-JR1 Usage (Note: e-journals from COUNTER-compliant platforms only represent 25.3% of all HKIEd e-journals)	420,219
Journal articles obtained via ILL	1,305
Average cost per article via pay-per-view (based on Taylor & Francis, Springer, Elsevier and SAGE)	HK\$325
Aggregated Value (C) = $(420,219 + 1,305) \times \text{HK\$}325$	HK\$136,995,300

HKIEd Lib ROI

Calculation (2013/14 data) (4)

(D) Use of Enquiry Services	
Enquiry questions answered	17,342
Cost per question	\$50
Aggregated Value (D) = $17,342 \times \text{HK}\$50$	HK\$867,100

HKIEd Lib ROI

Calculation (2013/14 data) (5)

(A) HK\$48,974,867

(B) HK\$27,867,409

(C) HK\$136,995,300

(D) HK\$867,100

Total Value = HK\$214,704,676

Total Library Expenditure = HK\$44,716,000

ROI = \$214,704,676 / \$44,716,000 = 4.80 : 1 or 380%

Exaggerated or Undervalued?

- Without conducting a user survey, the underlying assumption is arbitrary (e.g. why assume 50%, instead of 25% or 75%, of the users to purchase their own book copies?)
- But generally speaking, we consider that this calculation is generally conservative:
 - Only four use components were included while other aspects such as use of print journals, use of space and equipments, user education, etc were ignored.
 - Usage of most of our e-journals and e-books were not included in JR1 and BR2 because they were not COUNTER-compliant yet.
 - Only the use of full text (JR1 / BR2) was included – access of index databases and the discovery process was also ignored.

References

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Thank you!