

1 Compute clicks on documents

	$D_1$	$D_2$	$D_3$	...
$Q_0$	✓	✓	✗	
$Q_1$	✓	✗	✗	
	...			

2 Calculate ratios at each rank

$D_1$	$D_2$	$D_3$	...
$\frac{ \text{Clicks}_1 }{ Q }$	$\frac{ \text{Clicks}_2 }{ Q }$	$\frac{ \text{Clicks}_3 }{ Q }$	

3 Fit ratios to equation

$$p(\text{click}@k) = \varphi^k$$

Fitted value yields patience  
parameter for clicking on  
result summary link at rank  $k$