

IT Cost Survey for Swiss Banks 2023

Evaluation report based on effective data 2022 and budget figures 2023

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itopia is an IT and management consulting boutique focusing on the financial ecosystem

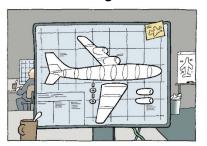


Imagining



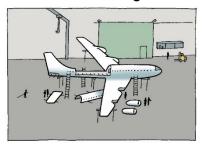
From the back of your napkin to the whiteboard: Here at itopia, we can help you sort the wheat from the chaff by drawing on our creativity and experience – giving shape to your ideas so that they can take flight.

Fleshing Out



Let's get specific: This step is crucial for the success of your initiatives. By setting clear objectives, we can focus our energies, and define the right solution and transformation strategy.

Constructing



What's needed when the construction teams show up for work is leadership: We will coordinate their work and guide them firmly toward the goal. The itopia Risk Manager is also on hand to make sure focus doesn't turn into tunnel vision.

Taking Off



We will devise the flight plan and provide the air traffic controllers for the maiden flight. After all, no transformation is complete until everything is safely off the ground. Then it's time to sit back and enjoy the ride.

Key findings 2023



1 - IT cost efficiency of banks falling steadily

In 2022, more than 75% of participating banks achieved a worse iR_{adj} cost ratio compared to the previous year. More than a third of these saw an increase in IT expenses of more than 10% in relation to business volume.

On average, itopia iR_{adj} cost ratios rose by 6% in 2022. This is set to increase by a further 13% in 2023 according to current budgeting figures – a historic high.

2 - Revenue per customer under pressure

In 2022, operating revenues per customer fell for both retail and private banks (4% and 5%, respectively). Whether the current market environment alone is responsible for this decrease will need to be determined.

3 - Employee productivity at banks is stagnating

The indicator for **employee productivity**, **pR**_{adj}, **worsened** at two thirds of banks. Some banks showed that a corresponding focus on investment has helped to positively influence this key metric in a sustainable manner.

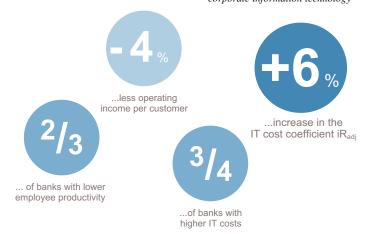






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Introduction



itopia IT cost survey

- Conducted on an annual basis since the year 2000, with more than 20,000 data points¹⁾
- Participants are smaller (< 300 FTE²⁾) to larger (> 900 FTE) retail and private banks.
- Pragmatic approach: questionnaire with nine bank key figures and a bank complexity profile (self-assessment)

Participants 2022/2023

- 39 banks: 27 retail banks, 12 private banks
- High consistency and comparability: ¾ of the participants from 2000 are still taking part today

iR

- Main coefficient used in the itopia IT cost survey evaluation report

(itopia ratio)

- Based on IT costs, balance sheet total, and assets under management
- We consider this coefficient to be better than volatile earning-based ratios (e.g. cost/income ratio)

$$iR_{raw}$$

 $iR_{raw} = \frac{11 \text{ costs}}{1.1 \times \text{(balance sheet total)} + 0.3 \times \text{(assets under management)}}$

iRadj

- The "bank complexity" factor (f_{Bank}) is used to facilitate comparability of banks
- Bank complexity is derived from a profile assessed by the bank itself

$$iR_{adj} = \frac{IT \ costs}{1.1 \times (balance \ sheet \ total) + 0.3 \times (assets \ under \ management)} \times \frac{1}{f_{Bank}}$$

pRadi

- The Bank's employee productivity is assessed via the ratio pR adj
- This ratio is calculated on the basis of bank employees, total assets, assets under management and bank complexity.

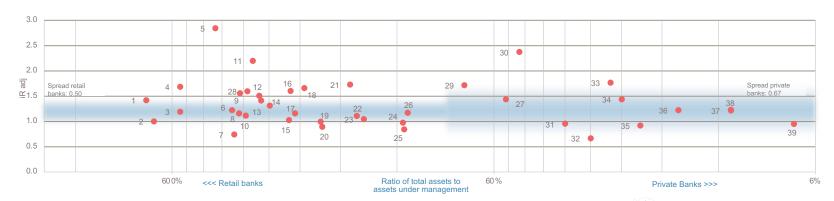
$$pR_{adj} = \frac{\text{\# bank employees (excl. IT staff)}}{30 \times (\text{balance sheet total}) + 10 \times (\text{assets under management})} \times \frac{1}{f_{Bank}}$$

¹⁾ Historical values may vary due to subsequently reported corrections

²⁾ Full-time equivalent

Data basis 2022 IT cost coefficient iR_{adj} grouped by business model





- In general, a cost coefficient iR_{adj} of 1.0 is considered ideal. On the other hand, a bank with an iR_{adj} of 2.0 spends 100% more on IT than an ideal bank with an iR_{adj} of 1.0.
- For 2022, the number of banks achieving an iR_{adj} of 1.0 or less was similar to 2021 (9 out of 39: 5 retail banks and 4 private banks). Only 3 banks still had an iR_{adj} of 2.0 or higher (2 retail banks, 1 private bank).
- Nevertheless, the individual values showed a deterioration compared to the previous year.

- Compared to 2021, a total of
 30 banks (20 retail banks and 10 private banks) had
 a higher iR_{adj}; 12 of them with an increase of more than 10%.
- Only 6 retail banks and 2 private banks were able to reduce their iR_{adj} in 2022 or keep it at the same level.
- The spread remained stable overall for both retail and private banks.



Observation

For 2022, ${}^4/{}_5$ of the participating banks had a higher cost coefficient iR_{adj} than in the previous year; ${}^2/{}_5$ thereof with an increase of more than 10%.

Development over time 2002 - 2022 IT cost coefficient iR_{adj} – median of all participants





- In 2022, the median of iR_{adj} across all participating banks increased from 1.15 (2021) to 1.22 (2022).
- Based on the budgets, an even stronger increase in the itopia IT cost coefficient iR_{adj} to 1.38 could take place in 2023.
- 2002–2016 saw a continuous improvement in IT cost ratios. The increase in 2007 and 2008 was as a result of the financial crisis.
- This ratio has increased since 2017 2020 being an exception due to the effects of the COVID pandemic.
 - Budgeting figures have shown this increase is expected to continue in 2023.

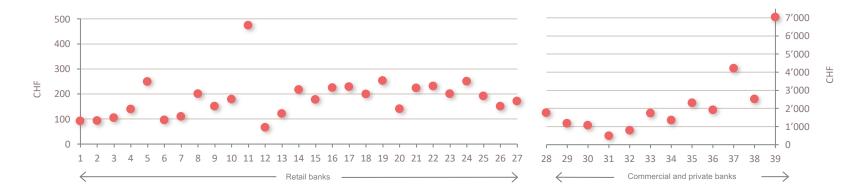


Observation

Budget adherence or forecasting accuracy was very high in spring 2022. Actual values confirm the previous assumption of a cost increase of 6% compared to 2021. The latest budgeting figures suggest this increase is set to continue in 2023.

Data basis 2022 IT costs per customer – retail banks vs. private banks





- For the retail banks, IT costs per active customer varied between CHF 66 and CHF 253, with one exception of over CHF 400. The median IT cost per customer is now CHF 178.
- For private banks, IT costs per active client varied between CHF 476 and CHF 4,210, with one exception at CHF 7,034. The median for private banks now stands at CHF 1,742.
- For retail banks, IT costs per customer showed an increase of 4% compared to 2021. The spread even increased by 29%.
- In contrast, the participating private banks recorded a slight reduction in their costs per client of 3% as well as a 27% reduction in the spread.
- The number of customers at all banks was mostly stable (+1.1% at retail banks, +0.6% at private banks).

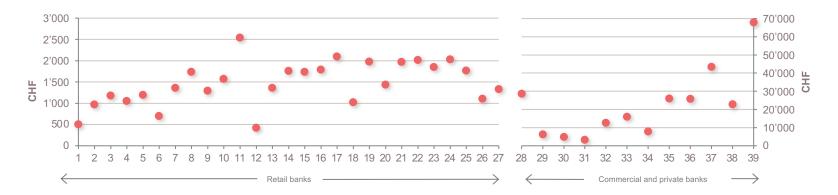


Interpretation

The increase in IT costs per customer at retail banks (+4%) is the result of years of increasing investment in digitalisation.

Data basis 2022 Operating income per customer – retail banks vs. private banks





- For retail banks, the operating income per active customer was between CHF 420 and CHF 2,541.
 Half of these generated between CHF 1,140 and CHF 1,818 per year and active customer. The median for retail banks was CHF 1.435.
- For private banks, the operating income per active client varied between CHF 3,320 and CHF 43,358, with one exception at CHF 67,876. The median for private banks was CHF 19,579.
- With a stable customer base, operating income per active customer decreases by 4% and 5% respectively for both retail banks and private banks – compared to the previous year.



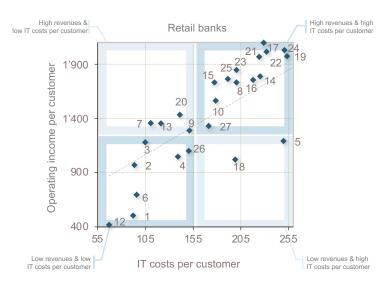
Interpretation

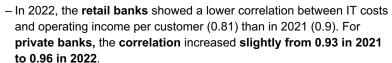
The earnings side came under pressure again, which is probably due to the market environment.

The extent to which newly acquired customers can optimise revenues or costs in the medium-term should be well assessed.

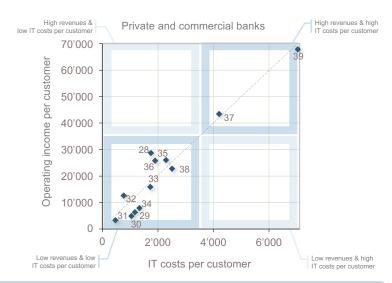
Data basis 2022 Operating income in relation to IT costs per customer







 The correlation values of both private and retail banks nevertheless remained at a high level.





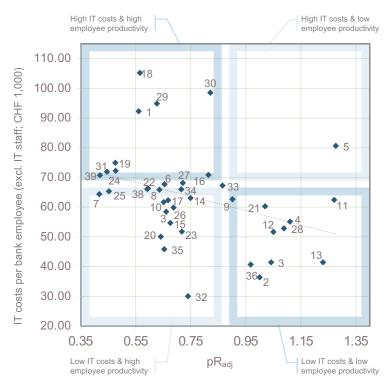
Potentials

Banks with low revenues and high IT costs per active client have room for strategic and/or tactical improvement.

With simultaneously high IT costs and operating income, detailed consideration of the business model and personnel expenses is necessary.

Data basis 2022 IT costs per bank employee in relation to pR_{adj}





The effective use of IT ideally leads to improved employee productivity, which more than compensates for the higher IT costs.

A large number of institutions continue to be in the quadrant of low IT costs & high employee productivity. The trend line is also the same as in the previous year. Nevertheless, the values for the individual banks have deteriorated:

- IT costs per employee: From 2021 to 2022, only 14 banks were able to reduce these costs (8 retail and 6 private banks). On the other hand, 23 banks (18 retail and 5 private banks) saw their costs deteriorate.
- Employee productivity (pR_{adj}): Again, only 11 banks were able to increase employee productivity from 2021 to 2022 (9 retail and 2 private banks). At 26 banks (17 retail and 9 private banks) the value deteriorated.



Interpretation

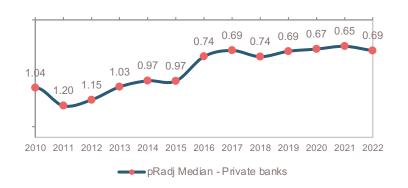
Rising IT costs with stable or even declining employee productivity must be considered individually.

The **impact of IT investments only unfolds over time**. Therefore, in addition to the investment focus and the design of effective solutions, attention must also be paid to the long-term **measures for realising benefits**.

Development over time 2010 – 2022 Employee productivity over time







- Employee productivity measured in terms of total assets and assets under management per bank employee rose steadily for retail banks until 2020.
- While the median pR_{adj} for retail banks remained stable in 2022 compared to the previous year (0.69), the pR_{adj} value for half of the banks was between 0.61 and 1.01, which represents a relative decrease in employee productivity of 8% compared to 2021 (0.57–0.93).
- In the case of private banks, employee productivity has sometimes fluctuated considerably over a longer period of time
- In 2022, the median pR_{adj} with a value of 0.69 deteriorated by 6% for private banks compared to the previous year.

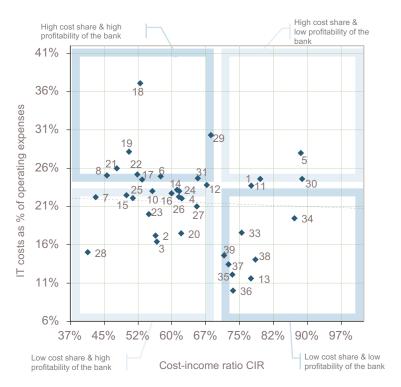


Interpretation

Employee productivity, which presumably increased due to digitalisation in recent years, has reached a plateau; a change in investment focus may also be partly responsible for this.

Data basis 2022 IT costs as % of operating expenses in relation to CIR





The experience of recent years has shown that banks that invest effectively in their IT have a high IT cost ratio, but are also more profitable in comparison. In 2022, this correlation was less pronounced.

It should be noted that, for many IT initiatives, the impact on profitability only becomes visible with a 3–4 year delay.

In 2022, the share of IT costs in operating expenses increased further, with a median of **22.5%** (2021: 22%). At **22 banks** (16 retail and 6 private banks), the use of resources changed in the direction of IT; the spread also increased.



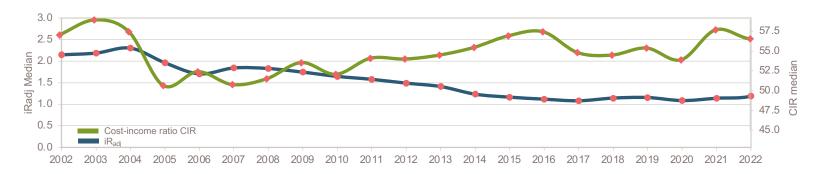
Potentials

For institutions with **high IT cost share and low profitability**, **IT does not** – or not yet sufficiently – **contribute to profitability**.

If IT costs are low and profitability is low, there may be insufficient investment in IT. If the bank is not in a consolidation phase, targeted IT investments to increase profitability should be examined.

Development over time 2002 – 2022 IT cost ratio iR_{adj} & CIR – median retail banks





- Over a long period of observation, there is no clear correlation between the developments of iR_{adj} (as an indicator of IT costs) and the CIR (as an indicator of overall bank profitability).
- After ranging between 54.50% and 55.40% in 2017 to 2019, and falling again in 2020, the CIR median showed an increase to a high of 57.70% in 2021. In 2022, the value of 56.56% remained high in a long-term comparison, but was somewhat less pronounced than in the previous year.
- The development of the IT cost indicator iR_{adj} was less volatile. Improvements in the governance of the core IT areas showed their effect from 2010 to 2017.
- Due to the strong dependence of the CIR on the bank's highly volatile earnings side, the costincome ratio is not suitable for the long-term management of IT.



Interpretation

Either the IT investments made in recent years are not having the desired effect or a different investment focus has been pursued. If lower returns are expected in the long term, the investment priorities may need to be reviewed.

Development over time 2002 - 2022 IT cost ratio iR_{adj} & CIR – median private banks





- Private banks had more room for improvement in IT management compared to retail banks: Especially from 2009 to 2015, IT cost efficiency improved even more at private banks compared to retail banks. More stringently managed IT helped banks stabilise overall profitability.
- The private banks have been able to keep costs and revenues in balance since 2016.
- The results show slightly lower CIR values for the field of participating private banks since 2019. Since 2019, there has been a decline from 77% to 72.9%.

 The IT cost coefficient iR_{adj} increased from 1.02 to 1.23 over the period from 2019 to 2021 and remained at this value in 2022.

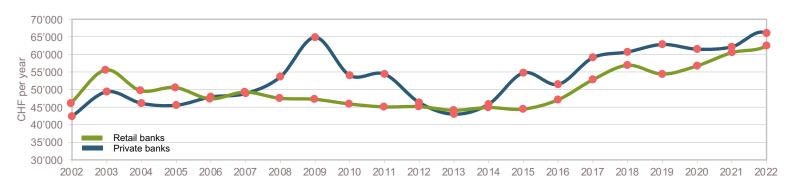


Interpretation

The private banks may be under less pressure in terms of their clients' digitalisation expectations – and can thus focus their IT initiatives more on improving the cost efficiency of the bank as a whole.

Development over time 2002 – 2022 IT costs per bank employee – retail banks & private banks





- Over the period 2013 to 2018, IT costs per employee increased for both business models (retail banks: +31%, private banks: +41%).
- For private banks, investment in IT increased significantly from 2021 to 2022 (+6.2%), while for retail banks this trend has been significant from 2019 to date (+15%).
- For both retail and private banks, the values in 2022 were at the highest level in the respective overall time series.
- The increased costs at retail banks could be an effect of the ongoing digital transformation (see <u>itopia focus on digitalisation</u>), possibly intensified by increasing costs in the area of risk and compliance due to data protection requirements and cloud initiatives.
- Increasing sourcing of business processes and products could also explain higher IT costs per employee. However, the slightly increasing number of employees at the same time speaks against this.



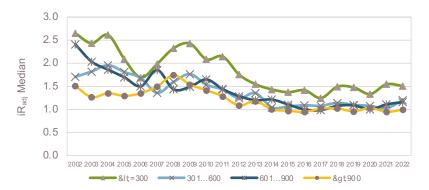
Observation

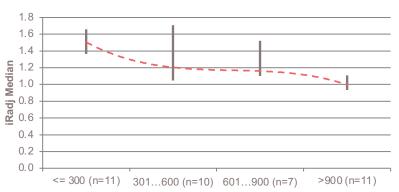
Overall, the development is consistent with the other indicators and points to higher IT expenditure overall.

However, IT costs per bank employee can only be conclusively assessed in conjunction with a bank or sourcing analysis.

Development over time 2002 - 2022 IT cost coefficient iR_{adj} depending on bank size







- The class of small banks (<=300 full-time positions) improved slightly with an iR_{adj} value of 1.51 (-3%) compared to 2021. The costs remained the highest compared to other size classes.
- Banks with 301–600 full-time positions showed a higher value than in 2021 (+17%) with an iR_{adj} of 1.2. Compared to other size classes, they showed the greatest increase.
- Banks with 601–900 full-time positions had to accept a slight efficiency reduction of 1.16 (previous year: 1.11).
- Banks in the largest class (>900 full-time positions) lost the efficiency gained in 2021 (8%). Nevertheless, the iR_{adj} level in 2022 of 1.00 was very good. This means that large banks once again achieves the best value for all size classes.

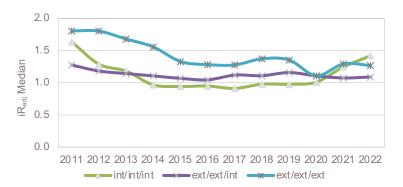


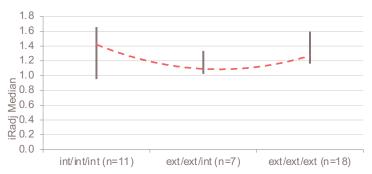
Interpretation

In particular, medium-sized banks with outsourced operation of core banking systems often invest in additional initiatives due to digitalisation and build up IT resources again themselves. This is now first noticeable in the costs and the possible effects on the business volume will follow later.

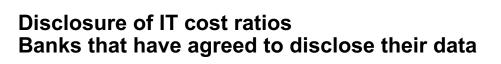
Development over time 2002 - 2022 IT cost coefficient iR_{adj} dependent on IT procurement policy







- The illustrations show the influence of the IT sourcing model on IT cost efficiency.
 Three areas are distinguished, which can be provided internally or externally:
 - Area 1: Infrastructure Operations (ITO)
 - Area 2: Application Operation (AO)
 - Area 3: Application Management (AM)
- The comparison is only made for the three predominant combinations:
 - Fully internal sourcing of IT (int/int/int)
 - External infrastructure and application operation (ext/ext/int)
 - Complete outsourcing (ext/ext/ext) of the core banking solution
- The class of banks with fully internal IT (int/int/int) has substantially deteriorated in terms of its cost coefficient iR_{adi} (1.25 to 1.42 in 2022)
- The class with fully external procurement of IT services (ext/ext) has slightly improved in terms of its cost coefficient iR_{adj} (1.29 to 1.27 in 2022), but with a higher variance.
- Banks with external infrastructure and application operations and internal application management (ext/ext/int) continued to show robustness, but with a slight increase in iR_{adj} from 1.07 in 2021 to 1.09 in 2022. This class continued to show the best IT cost efficiencies

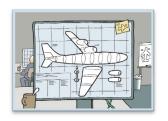




Bench #	Bank name	Core application	IT procurement policy in relation to core application ^{*)} , ext. partner					
If the participating bank agrees to the disclosure of its data, the following information will be								
provided to those banks that have in turn agreed to the disclosure:								
	p. 0.1.000 to 11.000 same that 1.000 is tall 1.000 to 11.000 to 11.000 to 11.000 to 11.000 to 11.000 to 11.000							
	Bank number, bank name, core application (package name), IT procurement policy*), ext. partner							
Currently, 15 banks have agreed to exchange exchange their data.								

*)	IT sourcing policy	Infrastructure operations	Application operations	Application management
	Outsourcing	external	external	external
	In-house	internal	internal	internal
	IT Operations	internal	external	external
	Ext. Applic.Mgmt.	internal	internal	external
	Int. Applic.Mgmt.	external	external	internal





ANNEX: Methodological notes and guidance for understanding the report

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Introduction IT cost coefficient iR_{adj} and data basis, evaluation iR_{adj} grouped according to business model



Introduction iR_{adi}

iR = itopia Ratio

 Main coefficient used in the itopia IT cost survey evaluation report

Based on IT costs, balance sheet total, and assets under management

 We consider this coefficient to be better than volatile earningbased ratios (e.g. cost/income ratio)

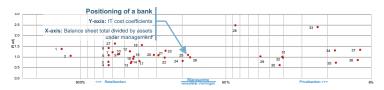
$$iR_{raw} = \frac{IT \text{ costs}}{1.1 \times (balance \text{ sheet total}) + 0.3 \times (assets \text{ under management})}$$

iR_{adi}

- The "bank complexity" factor (f_{Bank}) is used to facilitate comparability of banks
- Bank complexity is derived from a profile assessed by the bank itself

$$iR_{adj} = \frac{IT\ costs}{1.1 \times (balance\ sheet\ total) + 0.3 \times (assets\ under\ management)} \times \frac{1}{f_{Bank}}$$

Evaluation iR_{adi} grouped by business model



- The sorting criterion on this chart (X-axis) is the balance assets divided by assets under management. The horizontal distance is measured in percentages.
- The Y-axis shows the IT cost coefficient iR_{adj}. The red dots show the positioning of a bank.
- The closer two banks are positioned on the X-axis, the more similar their ratio of balance sheet assets to assets under management and thus also their business model. Deviations on the Y-axis, on the other hand, show different cost structures.

This particularly affects retail banks between 300-400%.

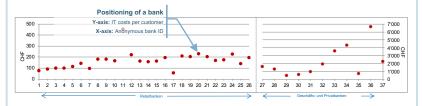
- A bank with an iR $_{\rm adj}$ of 2.0 spends 100% more on IT than an ideal-typical bank with an iR $_{\rm adj}$ of 1.0.



Data basis evaluations with focus on "customer"

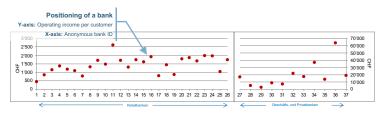


IT costs per customer – retail banks vs. private banks



- On the X-axis, the participating banks are listed with their anonymous ID.
- The Y-axis shows the IT costs per customer.
- IT expenses per active customer are *generally* significantly lower for retail banks compared to commercial and private banks: The presentation is therefore made with *different scales for* the two bank classes.

Operating income per customer – retail banks vs. private banks



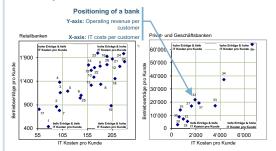
- The operating income per active customer (Y-axis) is significantly lower for retail banks compared to commercial and private banks (X-axis):
 The presentation is therefore made with a different scale for the two bank classes.
- A consolidated view of operating income and IT costs per customer is also included in the standard report.
- The development of operating income per active customer is an important topic for the banks. This key figure is important, for example, in order to consistently assess IT investments in digitalisation in terms of their potential to generate additional income or lower costs per customer.



Data basis evaluations with focus on "IT costs"

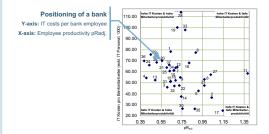


Operating income in relation to IT costs per customer



- These charts show the operating income per customer (Y-axis) in relation to the bank's IT expenditure (X-axis), both per active customer.
- As a rule, attention is paid here to the correlation.
 This is more or less high, depending on whether they are retail banks or private banks.
- Ideally, a bank can convert its IT expenditure into at least a proportional increase in business value, in this case operating profit.

IT costs per bank employee in relation to pR_{adi}

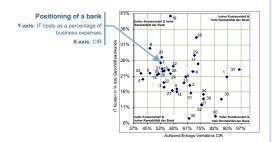


 This chart shows the IT costs per bank employee (excl. IT staff) (Y-axis) in relation to the bank's employee productivity, assessed via the ratio pR_{adj} (X-axis).

$$pR_{adj} = \frac{\text{\# bank employees (excl. IT staff)}}{30 \times (\text{balance sheet total}) + 10 \times (\text{assets under management})} \times \frac{1}{f_{\text{Bank}}}$$

 The goal is for IT to support employee productivity. Low employee productivity combined with high IT costs indicates that IT investments may not be effectively targeting productivity levers.

IT costs as % of operating expenses in relation to CIR



- This chart shows IT costs as a percentage of operating expenses (Y-axis) in relation to the bank's cost-income ratio CIR (X-axis).
- Banks that understand how to use IT to tap into new market opportunities have higher IT costs but are profitable.
- Banks that balance all costs well while achieving high profitability are best in class.



Development over time IT cost coefficient iR_{adj} and IT cost coefficient iRadj & CIR – medians

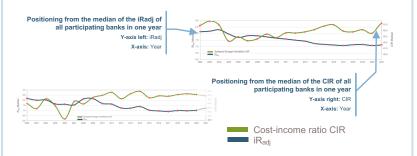


IT cost coefficient iR_{adi} – median of all participants



- The IT cost coefficient iR_{adj} (Y-axis) is calculated as the median of all
 participating banks over the years (X-axis), with an outlook for the
 following year based on available budget figures.
- The graph gives an indication of the development of the banks' IT costs over time.

IT Cost Coefficient iR_{adj} & CIR – median retail banks and private banks



- The charts shows the development of the cost-income ratio CIR (Y-axis, right) compared to the development of the itopia IT cost coefficient iR_{adj} (Y-axis, left) for retail and private banks. This is also a temporal progression over the years (X-axis).
- Due to the lagged effect of IT investment decisions, iR_{adj} is more meaningful than more volatile metrics such as IT costs compared to CIR.



Development of IT costs per bank employee over time







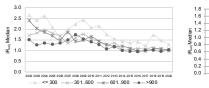
 The chart shows the development of IT costs per bank employee (Y-axis) for the two groups of participating banks over the years (X-axis).

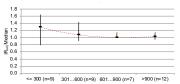


Development over time iRadj and bank size or IT sourcing policy



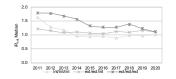
IT cost coefficient iRadj dependent on bank size

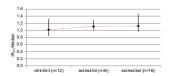




- The graphs show the development of the itopia IT cost coefficient iR_{adj} for banks of different size classes (y-axis):
- Banks with up to 300 full-time employees
- Banks with 301 to 600 full-time employees
- Banks with 601 to 900 full-time employees
- Banks with over 900 full-time employees
- The first graph is a chronological progression over the years (X-axis).
- In the second graph, the focus is on the current evaluation year. The size classes are shown on the X-axis.

IT cost coefficient iR_{adj} dependent on IT sourcing policy





- The illustrations show the influence of the IT sourcing model on IT cost efficiency.
- Three areas are distinguished, which can be provided internally or externally:
- Area 1: Infrastructure Operations (ITO)
- Area 2: Application Operation (AO)
- Area 3: Application Management (AM)
- The comparison is only made for the three predominant combinations:
 - Fully internal sourcing of IT (int/int/int)
 - External infrastructure and application operation (ext/ext/int)
 - Complete outsourcing (ext/ext/ext) of the core banking solution
- Banks with different IT sourcing policies may be represented in too small a number and are not shown for statistical reasons.
- The first graph is a chronological progression over the years.
- In the second graph, the focus is on the current evaluation year. The size classes are shown on the X-axis.

Thank you.





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