SWIFT Institute Student Challenge

Financial Solutions from the Next Generation

COMPETITOR'S HANDBOOK 2018

1. FOREWORD

Transformation in the financial services industry is driven by a number of factors such as changing customer expectations, shifting organisational demands, increased market competition, the need for more efficient operations, and new regulatory interventions. Perhaps the most powerful influence of change in finance is that of the newly introduced digital innovations and information technologies. The emergence of FinTech (financial technology) innovation as a disruptive force that looks to challenge the established processes and infrastructures in banking has the potential to disintermediate or, at the very least, reshape incumbent financial institutions and make them rethink how services are offered to customers.

One of the most recent developments driving digital transformation in the banking sector is that of "open banking" (or "open data") – a regime that aims to put customers at the centre and allow them to receive better deals from their banks by permitting financial information to be shared securely with other banks and external providers. Application Programming Interfaces (APIs) have been deemed as the most reliable and tested technology to facilitate secure and reliable access to customers' account and payment information. However, this brings with it the increased risk of personal banking data being compromised. Ensuring data privacy is therefore of utmost importance in this new environment.

The SWIFT Institute Student Challenge aims to tap into the minds of the next generation of thought leaders, entrepreneurs and practitioners in order to build upon these changes and mitigate the risks.

*I am therefore delighted to confirm that the **SWIFT Institute Student Challenge 2018** will take place in Australia, and culminate in a grand finale at Sibos Sydney on 25th October 2018.*

*The topic for the 2018 Student Challenge is **Data privacy in an Open API world – how do we keep personal information safe in an open data environment?***

The aims of the SWIFT Institute Student Challenge are:

    (i)   To present a challenge or scenario to the student community to analyse and produce new thinking, solutions and concepts.

(ii)   To help support and coach students and teaching staff in presenting these ideas to the financial sector.

(iii)   To help promote and commercialise these ideas within the financial sector, where possible, to affect change for the better.

(iv)   To provide an ongoing network and community for all participants and stakeholders.

I look forward to receiving your submissions, and hopefully meeting you at Sibos, where you will have the opportunity to present your ideas to a global financial sector audience.

Peter Ware

Director, SWIFT Institute

2. THE CHALLENGE

The challenge has been selected by the SWIFT Institute based on current industry priorities and challenges, with input from the Australian financial community.

The 2018 SWIFT Institute Student Challenge:

Data privacy in an Open API world - how do we keep personal information safe in an open data environment?

Much of the open banking initiatives around the world are driven by regulatory interventions that demand more competition in order to secure better quality services and lower prices for consumers. For example, in the European Union, the Second Payment Services Directive (PSD2), requires banks to grant third party (e.g. Account Information Service Providers (AISPs) and Payment Initiation Service Providers (PISPs)) access to their customers' accounts and payment services following customer consent. Account information services will provide aggregated information on one or more payment accounts held by the customer (e.g. transaction history and balances) with either one or more payment service users and providers (PSPs). Such services could be provided by banks, FinTechs and other non-traditional financial services firms as well as retailers and social media and telecom companies. In addition, payment initiation services will also allow such companies and merchants to initiate online payment orders at the request of the customer. A similar arrangement in regard to the sharing of "open (customer) data" has been proposed through the Competition and Markets Authority in the UK who mandated nine major UK banks to form an implementation entity in order to set up the common technical standards underpinning open banking. In contrast to PSD2, the Open Banking initiative in the UK has been more explicit around the definition and development of the required technology, as well as the security and messaging standards. Following the UK and the EU, other regulators around the world are considering a transition to open banking.

The Australian government has plans to foster competition in the economy and support a growing FinTech community by introducing a data-sharing environment starting from a "Comprehensive Credit Reporting (CCR)" scheme

where major lenders will have to share more detailed data about their customers with credit agencies[1].

Overall, by allowing third party access to the existing transmission and distribution network of incumbents, regulators help "unbundle" or "separate" services to create a more level playing field that will respond to the "needs of customers and the opportunity to provide more innovative and personalised banking products and services[2]. Regulators can use such regulatory approaches along with advanced technology to tackle issues such as price discrimination, cross subsidies, and high barriers to entry that are often present when incumbents hold high market power with limited competition.

In this context, Application Programming Interfaces (APIs) have been deemed as the most reliable and tested technology to facilitate secure and reliable access to customers' account and payment information. At a very basic level, an *application programming interface*, or *API*, is "a way for two computer applications to talk to each other over a network using a common language that they both understand"[3]. Editor-in-Chief of ProgrammableWeb.com, David Berlind describes APIs as; "electrical sockets that have predictable patterns of openings"[4] into which, other applications that match those patterns can "plug in" and consume them, in the same way electrical devices consume electricity. This systematic way of sharing data can make it easier for organisations to collaborate and access information when and how they need it, thus helping to interconnect services and business processes, thereby creating a better omni-channel experience for customers.

In the banking sector this means that banking institutions can choose to take advantage of the opportunities that API technology offers by interacting with the greater ecosystem of market participants and service providers. This enables banks to make available to their customers enhanced services and more value-added propositions, which they would not be able to offer otherwise. In doing that, however, banks will have to rethink their role in financial services as intermediaries and explore new business models and ways or profiting that will be more akin to the use of APIs and the collaborative environment that emerges.

---

[1] Fry, Elizabeth (2017) "Scott Morrison mandates data sharing", RFi Group.
[2] Australian Bankers' Association (ABA) "Bankers Association warms to Open Data" (2017).
[3] Jacobson, D., Brail, G. and Woods, D. (2012). "APIs: A Strategy Guide", O'Reilly Media Books.
[4] https://www.programmableweb.com/news/what-api-exactly/analysis/2015/12/03

In theory, opening up the APIs of banks and instructing them to share customer data, provides an opportunity for the adoption of a *platform business model*. This move which has been coined by a few as "Banking-as-a-Platform" (BaaP) describes the premises upon which banks can adopt a platform strategy model and compete by providing systems that offer valuable new goods and services to customers[5]. Part of this newly defined competition (through which the banks will become "re-intermediaries" by introducing a new way of intermediation in banking) is to create and maintain innovation ecosystems where the leanest and most attractive experience for both developers and wholesale and retail customers will prevail. Following this digital transformation and the move to an open-API economy, banks and other licensed institutions that hope to become platform leaders will also need to decide on the level of openness with which they wish to engage their community.

While the benefits of interoperability and standardisation among heterogeneous technical banking systems using open APIs can be obvious, there is still the question of consumer privacy and security in the context of sharing sensitive financial data. These are important issues which can have an impact on the overall success of any open banking initiative around the world. Lack of trust from the customers' perspective regarding the risks to allowing third parties to access customer data in their bank will prevent them from granting access to important information which can be used to their advantage. As a result, keeping personal data safe in an open banking environment is of the utmost priority!

The 2018 SWIFT Institute Student Challenge focuses on the safety of personal data. Specifically, the challenge is:

> ***Data privacy in an Open API world - how do we keep personal information safe in an open data environment?***

Students are welcome to interpret this challenge as they wish. Ideas can result in technology based solutions, policy / legal suggestions, etc. The aim with this challenge is to explore ways in which personal financial data can be kept safe and secure in an environment where data is increasingly being shared.

---

[5] For a more detailed discussion on platform business models and the strategic implications of Open APIs in banking, see Zachariadis, M. and Ozcan, P. (2017). "The API Economy and Digital Transformation in Financial Services: The Case of Open Banking".

3. WHO CAN ENTER

The Challenge is open to students currently enrolled at any recognised University or further educational establishment in Australia. Professors, readers and teachers are permitted to assist their students with their submission, but the submissions must be in the name of the students.

Submissions can be made by individual students or by teams of students (across the same or different universities or colleges). Every submission is expected to give their entry a name, which relates to either their idea or their team (e.g. APISolutions, Team Alpha, etc.). This is purely to help distinguish one submission from another.

Entry into the challenge does require a commitment in terms of time, media exposure and potentially cost to each entrant. The rewards, however, are significant. There is a cash prize, professional coaching, and exposure of your ideas to the global financial industry.

Shortlisted applicants will be invited to attend a coaching workshop and a showcase event where they will present their idea. Both will take place in Sydney, Australia in October 2018.

4. BENEFITS OF ENTERING

The benefits of participating in the Challenge are:

(i)   The opportunity to engage with the global financial industry and make a practical and positive difference to the financial sector;

(ii)   to stimulate innovation and creative thinking amongst students;

(iii)   to receive both financial and reputational benefits;

(iv)   to showcase and attract possible research and grants from the financial sector.

The SWIFT Institute will ensure all shortlisted participants are supported throughout the process. One of the challenges for any new idea is its concise and complete presentation in a way to attract interest. The SWIFT Institute will host one-to-one calls with shortlisted participants to both mentor and coach participants to construct a presentation in the most effective way in terms of content and delivery. A full day coaching workshop will also be held just prior to Sibos in Sydney for all shortlisted participants. This has proved to be highly successful in the past and is of great benefit to student development.

5. HOW TO ENTER

To enter the challenge, please log onto www.swiftinstitute.org/swift-institute-challenge/ where you will find details and instructions on how to upload your submission. Your submission should define your solution to meet the challenge:

> ***Data privacy in an Open API world - how do we keep personal data safe in an open data environment?***

Your submission should be a free format written report of no more than 1,000 words entered into our online entry form. Supporting documentation can be uploaded in pdf or PowerPoint format. It should explain in full detail your solution, and include diagrams, flow model, etc., as applicable.

Your submission will be assessed and ranked. The highest ranked submissions (up to a maximum of eight) will be invited to participate in the coaching workshop and then to present their solution at the annual Sibos conference, which takes place in 2018 in Sydney from 22 to 25 October.[6] The coaching workshop will be held on Sunday 21 October.

The decision of the judges to arrive at the top eight entries will be final. Individual rankings will not be disclosed. All submitting teams will be notified as to whether or not they have made it through to the top eight.

Upon notification that you have made it through to the top eight, details of the coaching workshop and Sibos, where final presentations will take place, will be confirmed.

Please note:
Any information submitted will only be accessible by the SWIFT Institute administrators and the judges during the judging phase. All submissions should be clearly marked as copyrighted by the submitting team. The intellectual property relating to your submission remains with you.

---

[6] A maximum of two members of each of the eight finalist teams will be invited to the coaching, and to attend and present at Sibos.

6. THE JUDGES

The SWIFT Institute has a pool of judges across the financial industry including a number of senior SWIFT staff. The judges are looking for innovation and free thinking that when applied will make a real practical difference to the banking sector and its customers.

These judges have an unparalleled source of experience and are able to give encouragement and qualified feedback at every stage of the challenge.

We find that many judges (and audience members who will see the final presentations) after the event continue to take an interest in maintaining contact with contestants, and can ultimately open doors to exciting new possibilities.

7. TIMESCALES

The website will be open for submissions from 08 January 2018 through to 30 June 2018. Judging of all entries will take place in July 2018. The Coaching Workshop will be held on Sunday 21 October 2018, and the Showcase from Monday 22 to Thursday 25 October 2018, both held in Sydney.

The overall winner of the Student Challenge will be announced at the end of the Sibos conference.

Timeline

08 Jan 2018	08 Jan 2018	30 Jun 2018	15 Jul 2018	31 Jul 2018	21 Oct 2018	22 to 25 Oct 2018
Launch of Challenge	Submission Website Open	Deadline for all Submissions	Judging of Submissions	Notification to all submitters of whether they are in the Top 10	Coaching Workshop in Sydney	Sibos in Sydney

8. THE PRIZES

There are numerous positive outcomes of being involved for students ranging from expert coaching and mentoring through to media coverage and exposure to members of the global financial industry. This is of course in addition to the kudos of winning the Challenge.

An engraved commemorative plaque will be presented to each of the eight shortlisted entries.

<u>Semi-Finalists</u>

The eight shortlisted teams will be invited to attend the world's premier annual financial industry conference, Sibos, taking place in Sydney from 22 to 25 October 2018.

- Two complimentary week long passes to attend Sibos Sydney (value of approx. AUD $5,000 each, or EUR 3,200).
- Reimbursement for two economy airfares and hotel accommodation to attend Sibos Sydney (for those entrants who are not based in Sydney).
- One day coaching session to refine the pitch before the showcase event.
- The opportunity to make a 10-minute presentation (including Q&A) to an audience of global financial industry executives and media.

<u>Winning Team</u>

The winning team will be decided through a combination of digi-voting from an audience of financial industry professionals and a panel of expert judges.

- Promotion to SWIFT's 11,000 member organisations around the world, and introductions to members who express interest in meeting you
- The winning entry will receive a cash prize of AUD $30,000.[7]

---

[7] The winning team is responsible for any taxes that may be incurred upon winning the cash prize.

9. RULES AND RESTRICTIONS

By submitting this application each applicant agrees that the SWIFT Institute may share any submitted material with competition judges, SWIFT staff and partners. Further it is recognised and accepted that any material submitted may be freely published by SWIFT and its media partners in the spirit of the competition.

All semi-finalists must present at the showcase to remain eligible.

The overall Challenge winner will be selected and announced at Sibos. Each team of finalists will present their idea to an audience of global financial industry professionals during Sibos. The audience will use digi-voting to select their stand out presentation. The audience is likely to change throughout the presentations, and therefore the same audience will not necessarily see all eight presentations.

There will also be a panel of expert judges, made up of senior industry professionals, who will see all eight presentations. They will also select their stand out presentation.

The audience and judges scores will be combined, thereby arriving at an overall winner. Only the winner will be announced. The remaining participants will not be ranked in any way. All decisions will be final.

APPENDIX – BACKGROUND INFORMATION

SWIFT Institute is the research arm of SWIFT. It aims to provide knowledge through sponsored research projects. The SWIFT Institute unites academic study with the practice of global finance to bolster the spread of big new ideas. Through the funding and publishing of a broad range of cutting-edge research, we encourage collaboration between thought leaders in finance and academia. The nearly 40-and counting grants awarded for independent research demonstrate the Institute's commitment to engaging the industry with relevant, constructive debate. The SWIFT Institute makes incisive research possible and ensures that the findings are effectively disseminated across the globe.

For more details please visit www.swiftinstitute.org

SWIFT is the Society for Worldwide Interbank Financial Telecommunication, a member-owned cooperative through which the financial world conducts its business operations with speed, certainty and confidence. More than 11,000 banking organisations, securities institutions and corporate customers in over 200 countries trust us every day to exchange millions of standardised financial messages.

For more details please visit www.swift.com

Sibos is the premier annual event for the financial services community. The conference and exhibition are organised by SWIFT, and facilitate debate, networking and collaboration around the future of payments, securities, cash management, trade and financial crime compliance. For one week every year, Sibos connects some 8,000 plus business leaders, decision makers and thought leaders from financial institutions, market infrastructures, multinational corporations and technology partners. Sibos takes place in Sydney in 2018 from October 22 to 25.

For more details please visit www.sibos.com

CONTACT US

The SWIFT Institute Challenge
c/o SWIFT
55 Mark Lane
6th Floor
London
EC3R 7NE

Email – nancy.murphy@swift.com
www.swiftinstitute.org/swift-institute-challenge/