Innovating for the Common Good

A dialog on steering innovation with Wolfgang Eger, Chief Information Officer of Swiss Post, moderated by Heike Bazak, Head of the PTT-Archives, and Christiane Sibille, president of the association History and Computing, including questions from the audience, edited by Vlad Atanasiu, member of the association History and Computing

The conference "Steering Innovation" represented the perspectives of historians, but would not have been complete without the participation of a party practically involved in innovation and the steering thereof. Specifically, how does a leader of a company think about these critical themes? What is the discourse constructed around them, and what imaginary is projected about them for the benefit of the company, the public, and the shareholders?

To this end, M. Wolfgang Eger, Chief Information Officer (CIO) of Swiss Post, was the guest at an afternoon round table with the event organizers, which was followed by a discussion with the conference participants.

The following transcript, which has been edited for brevity and clarity, provides the reader with an opportunity to gain insights into a variety of topics, ranging from the personal dimension of innovation to conceptual models of steering innovation, from what innovation means to Swiss Post to an international comparison of innovation cultures, along with the role of history and the potential contribution of historians in steering innovation.

Founded in 1849, Swiss Post offers postal, financial, and bus line services in Switzerland and abroad. It is one of the country's biggest national employers and wholly owned by the Swiss Confederation.

Wolfgang Eger has been CIO at Swiss Post since February 2019. He is responsible for thousands of applications and networks that generate petabytes of data and keep the company running. Previously, he held leading positions at Lufthansa, EDS Information Businesses and McKinsey, and was with Swisscom for sixteen years. He studied mathematics and computer science at the universities of Mannheim and Karlsruhe in Germany.

Being CIO at Swiss Post

M. Eger, we are honored to have you with us today, and excited to discuss innovation with you. We invited you to bring along a document or an object that has a special meaning to you – it might be related to the past, your

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present occupation, your status as a computer expert, or your function as CIO. Could you please present the object and tell us the story that links you to it, along with its meaning and importance?

I have two objects, in fact, but I had to leave one of them at home because it was too heavy to bring here. It was my first personal computer. I think most of us remember the first computer they ever worked on – in my case it was a Sharp MZ80A, and I still recall details about its microprocessor. However, what I brought with me for discussion has preoccupied me quite a lot over the past years, as it has many other people – a good portion of humanity, in fact, which this object has subjected to considerable socio-economic change. [He shows the audience his smartphone.] Many aspects of modern life have become difficult to imagine without the smartphone. What I consider fascinating about the smartphone in regard to the conference theme, "Steering Innovation", are not so much the technical feats materialized in this object as the changes that it has brought about for humans, both as individual beings and as communities.

How does the impact you describe translate to your professional work? At Swiss Post, Swisscom, and my other former employers, the most important question wasn't related to the technical side of innovation; instead, it was about asking seven times who really needs that "cool" idea, and what will change because of it. Innovation has to be seen as acting upon an ecosystem, which in turn acts on the innovation. An innovator has to be able to explain in a simple way why the innovation makes sense, before even starting to worry about its marketability and how much profit it might generate.

You studied computer science...

Is that a bad thing?

No, of course not – it's a compliment. My question is, could you imagine innovation happening without the contribution of information technology? I studied computer science, and my title is chief information officer, but I deal with many things that have little to do with computer science or technology. In other words, the focus on technology as a driver of innovation might be a popular idea that overshadows other factors. Just like "digitization"; it's a buzzword that can mean anything.

Could you please explain your role as CIO of Swiss Post?

I have two jobs. The first one is to ensure the day-to-day functioning of all of the company's computer-based processes, since very few things would function today without computers, whether it be letter and parcel delivery or banking [also part of the services offered by Swiss Post]. The

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Fig. 1: "Technology as a driver of innovation [...] can mean anything." (W. Eger) © Museum für Kommunikation, Bern; FD 00314, LIN_001497, FC 000629.

second one is that I have to consider the role of Swiss Post in the future. In this regard, let me ask you, how many of you sent a letter within the last month? [A few hands rise among the audience.] Two, three, four and a half... My children are no better. Only under parental duress could they be convinced to write a letter to a friend – not using a computer, but writing it by hand, putting a stamp on it and sliding it into a postbox. What that means is that the business model of Swiss Post, which was once based on letter delivery, has to change. To define the ways in which it will change is part of my job description.

Does Swiss Post innovate with in-house resources, or does it also work with academia?

We do both. In fact, we explicitly try to create diversity as a method for innovation. This is reflected by our promotion of diverse cultures and people within a distributed organizational structure. Physical and social spaces are also important factors in creativity. The people inhabiting them should be able to disconnect, to think spontaneously; it's hard to innovate on command, and I prefer to have my ideas while singing in the shower in the morning. The space should also invite exchanges, and sometimes even allow for experimenting with the weirdest ideas. Once the idea is brought out of these innovation spaces, a structured approach can take over: you had a cool idea, fine, now what? Convince me that your idea has worth and why I should invest in it. And we ask this question seven times over, rather than only once.

Is history taken into consideration in the innovation process at Swiss Post? Absolutely – history is enormously important. My father was a historian, so I also have a relationship with history at a personal as well as a professional level. The Swiss Post of tomorrow has to be grounded in its inherited "company DNA", perpetuating something of its 170-year-long history and the strong identification of the numerous co-workers with the "yellow brand", its mentality and language. The image that the company has to project goes beyond its employees; as a public service company, it also has to meet the expectations of the public. Suppose that, given my past experience at [the airliner] Lufthansa, I would propose that Swiss Post should expand into air transportation. To the everyday service user that might seem odd, but the historian might recall that airmail was instrumental in the early development of aviation, both globally and within Switzerland. These are very concrete examples of why, for a company such as Swiss Post, past history matters for future history.

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You work for Swiss Post and have previously worked for [the telecom company] Swisscom, both former PTT companies. To me, both of these companies appear to steer towards similar concepts of the future and similar markets. The Swiss government is also the majority stakeholder in both, and both have innovation departments. How close is the collaboration between them, and how close is the coordination with the federal government?

The common history and present commonalities of these two companies should not distract from a fundamental difference in outlook between the two: Swisscom is strongly market-oriented, while the driving principle of Swiss Post is the "service publique" (public service). Our obligation is to serve specific needs of the Swiss population and the national economy, but this is not the case for Swisscom, which is more telecommunication based.

You argued that creativity can be channeled to bring about the future while still remaining faithful to one's "DNA", and I found that very convincing. American companies, such as Amazon, Google, and Alphabet, seem to be more aggressive: they put together a company, they invest, try things out, look to see if there is any energy coming out of it, and in the worst case shut down the enterprise. This does not appear to be the Swiss way.

It's not the Swiss way, and neither is it the European way. The innovation culture in the US is very different from the European one – it's about "big money", "taking big risks", and "hire and fire." Either something works or it does not. As a consequence, it's thought that everybody should have monumentally failed at least once, otherwise that person is looked at with skepticism. When a company is looking for a new CEO, what matters during the selection process is not all the things a candidate has done

successfully, but what she or he has failed at. Europe has a different innovation tradition, influenced by its history. China, too, is different. Over the past years, I have had the opportunity to experience that difference first-hand, during collaborations with American and Chinese companies and the innovation departments of other big companies. The innovation taking place there is frightful. In China it is often seen that the leadership declares something to be a huge new innovation, that this is what we want to create, and that accordingly it will be brought into the world. The mentality is strongly top-down; the boss knows what innovation should be pursued and how it is to be implemented. I am sure this is not and will not be the Swiss model. We are more interested in smart and sustainable innovation. Look - why is it that Switzerland is the country with the highest amount of granted patents? It is because of our creativity, because of our education system, and because of our quality and security of living. This is why leading technology companies such as Google, IBM, and many more open research centers in this country. So culture is an important factor in the way innovation is done.

Innovation and Acceptance of Change

Is the future Amazon? Online shopping and the disappearance of brickand-mortar stores?

Do not underestimate the [German icon of consumer society] traditional Quelle-like catalog for mail-order products. Classics do not disappear overnight, but change does happen, and we'd better embrace it. Take for example the media industry: today, online advertising has become considerably more profitable than print advertising, and there are zillions of apps bombarding us with micro-targeted advertising. The use of postage stamps is also declining; maybe they will disappear altogether, maybe they will always be there, I don't know. But when volumes decrease, we have to ask ourselves what kind of services we should offer at Swiss Post. This sort of change is not instant, but rather a stepwise process; sometimes it takes place over the span of one or more generations, although the pace of change is increasingly rapid. My mother, for example, hates smartphones, while for my children the postage stamp has acquired a sort of emotional or exclusive character. I hear them saying "Great! I got a post stamp for my birthday!" The same thing applies to email. Microsoft announced that in ten years we won't be using email anymore. We can't even imagine what that might mean, how we're going to communicate without it. Yet we are all participants in these huge transformation processes. For me, the topics of community and convenience are particularly important in 128

this respect: that is, technologies that contribute to social harmony, and make life easier.

My father, who was a gold- and silversmith, likes to repeat that he's digitally illiterate, that he does not know his way around the world of digital technology. So I do think that convenience is an important factor.

It's possible that the moment I said email would disappear, the cogs in your brain started turning as you tried to figure out how you might communicate under those circumstances. There's a mix of emotions there: fear, curiosity, skepticism, maybe wonder. I experience this personally. You see, I have my tablet, which I know very well, and on which I've become accustomed to reading my emails – and I receive many, many emails at Swiss Post, I can assure you. I read them in the evening, so that I can organize my next day. Now, how is this going to work without email? Will we use Facebook, WhatsApp, or something similar? If so, the pressure one will feel will be of a different kind: when interacting via WhatsApp, people expect you to answer within ten minutes. This is new for my generation, and it's not possible for us to predict how it will work out. One positive way to look at these developments is to focus on the cool things about them.

Desktop computers, laptops, tablets, e-readers, smartphones, smart watches... All these technologies offer less and less space to display and interact with information, our view angle is reduced, and our movements are confined. What are the human impacts you anticipate as a result of these factors? I learned Latin in school as a child, but I do not expect the same from my own children. For them, it is more important to know how to find answers to questions by googling than to possess knowledge of things. In a few years we may have "Babel-fish" devices for automatic translation, and then it will no longer be necessary to learn foreign languages. So while I do not have answers to your questions, I feel nostalgia in it, triggered by the emergence of new technologies, which demand behaviors that are not always compatible with what we are accustomed to. Can we stop these social and psychological transformations? No. We need to learn how to live with them.

Could you tell us about the most exciting project you are working on right now – if you can disclose it, of course?
Unfortunately I can't.

That's too bad.
Otherwise you might copy it. Sorry, it's a trade secret.









Fig. 2: "[...] technologies that contribute to social harmony, and make life easier." (W. Eger) © Museum für Kommunikation, Bern; FFF 05909, FFF 05912, FFF 07828.

In that case, what is the most exciting project you've ever worked on that's now complete? You know, historians are also interested in the past.

I have a personal interest in drones. They are interesting from a technical perspective, as well as from many other perspectives. For example, how can you make money with drones? Or the regulatory aspects: for example, would you need to clear your flight plan with air traffic control? What happens if there's an accident? How do you handle popular opinion? When I sit in my garden and hear the sound of a drone, I start thinking that somebody is spying on me. This is a very broad and complex field. It will be interesting to see how it develops in Switzerland; in the US it will certainly be different, and different again in China. Another exciting area is that of autonomous driving cars, because I believe they will bring about radical social changes. But in terms of the next big technological shift we will see in the next few years, I am convinced that it will be augmented reality. It will be possible for an everyday person to wear glasses fitted with a small 15-gram integrated chip. Not the clunky Google Glass, which feels uncomfortable after half an hour, but something made for convenience. Convenience is the keyword for future technology.

Mechanisms of Steering Innovation

One fundamental question in relation to the conference theme of "Steering Innovation" is that of how innovation is steered. In other words, how do you select what is and is not innovated?

Innovating does not only mean having ideas – it's a lengthy process made up of many stages. So innovation selection is not a single decision, but instead a string of many decisions made while progressing through those stages. It starts with the typical picture of innovation, consisting in bringing

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together a diversity of people who may come up with new ideas - eliciting great ideas from such interactions is heavily steered, and a thoroughly studied domain. But then we have to ask seven times about the utility of these ideas, to find justifications as to why Swiss Post should implement them. This is also a strongly structured decision-making process, in which many factors play a role, such as the company's DNA and the history through which it is woven, which is something that the historians can tell us about. Then comes the next stage, finding funding, and after that we can move on to the implementation of ideas. Building prototypes and experimenting is a recursive creative phase of the innovation process, very different from the others, particularly with respect to the interaction between "chefs" and "non-chefs", managers and engineers. But this is something guite well understood, and most companies do it well. The real problem is market breakthrough and scaling. It is here that most fail - startups and established companies. The companies we know about are those that survived. As for the 99% of them that did not, well, we are not aware of them. How could we be? So the next big step in innovation comes after we see that an idea is functional, and consists in making it grow. This is a discipline in itself, and it's underestimated by many companies; it's very different from the startup culture, and also well steered, not towards profit-making yet but towards growth. The next stage comes when the idea has grown big enough that it can be incorporated into existing structures within a company and its ecosystem, which is a lot of work.

What kind of work?

Persuasion. A lot of persuasion is required to convince a company to provide you with the people, time, or money necessary to realize your ideas. Paradoxically, the newer and more uncommon the ideas are, the more difficult it is to sell them, because there are no reference points for use in judging the chances of success. The worst question that an innovator can be asked is, "Who has your idea already?"

Sometimes it is easier to buy startups to get to innovations than to innovate oneself.

Yes, but the evaluation of the startup is expensive. Buying startups is common practice; if you are only interested in the profit aspect of a business, then there are plenty of private equity funds that do nothing but buy companies, without really evaluating how good or bad their ideas are, and when they have a good business case then the company invests. Swiss Post does not do this, we don't buy randomly. We look for situations where "one plus one is three", where the outcome of the collaboration is greater than what any of the partners could do independently.

How national is innovation today? Is Swiss Post innovating through and for Switzerland, or is it trying to be part of bigger markets?

Swiss Post is not going global, that is correct. But if the innovation process is national, innovation per se is not: most of what we think about has already been thought of somewhere else, and innovation is instantly international, especially in the communication services domain. Furthermore, the process of innovation does not happen in a bubble, as the cultural image of the lone inventor might suggest. We are not taking a couple of bright people, locking them in a room for two months and then asking them what ideas they've had. Instead, we are connecting already-existing ideas in new ways, taking advantage of ecosystems and creating new ones via a process similar to a puzzle game. This principle is one of the reasons why Switzerland ranks among the top patent-holding countries and is deeply involved with the theme of intellectual property rights.

Innovation at Swiss Post is of course oriented towards production and profit. However, there exist important issues – debated in the field of history, in the humanities, and in society more generally – that question the notions of progress and technologies, such as the anthropocene and the global environmental catastrophe. How do you relate to these ideas at Swiss Post, as a leading figure in the company?

The core identity of the Swiss Post, its DNA, is public service, "service publique." This is why when dealing with innovation we ask seven times over, "Why?" What does Switzerland gain? What does the Swiss citizen gain? For example, when we invest in e-health technologies, our goal is not to obtain marketable data about patients; we do it because it makes communication between citizens, doctors, and hospitals easier. It is these types of innovations that we're looking for. We are also looking for innovations developed by companies other than ourselves, such as the smart glasses, because we are part of the global innovation system in which we have to participate. However, we try to obtain utility for the Swiss economy and society from these innovations.

Do you have a historian on your innovation team?

No, although I would like to have one. Somebody who knows how to tackle a question such as "What remains the same?", from the most general level of history to company history to the biographies of individuals. Another concept that a historian understands how to approach is that of the overarching connections within society, throughout history, and between people, which might lead to unexpected insights when analyzed. A person who could play that role would increase the diversity of the innovation team at Swiss Post.

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Speaking of progress, the saying goes that "you can't stop progress", but there has also been an observable shift since the end of the 20th century towards a risk-avoiding society. The question thus arises as to whether we should innovate for the sake of innovation, or, rather, be more cautious and think "seven times over", the approach you mentioned in regard to the innovation philosophy of Swiss Post. Is the key question "why innovate" or "why not innovate"?

Indeed, I've encountered a similar line of questioning among European companies, in my discussions with colleagues, and more specifically at Swiss Post. If we consider the caricature of "American" technological innovation, then most innovations are intended to make money rather than to benefit humanity. Isn't there another model, a social one, in which the profits of companies are oriented not to satisfy shareholders but to benefit the society at large? Swiss Post is a company that is uniquely positioned to deal with this question, since on one hand its raison d'être is the public service and creating jobs in Switzerland, and on the other hand it must make profit to be able to sustain the service and the jobs. I think we are moving away from the classical shareholding mindset of profit maximization towards value creation for society, or at least towards a mixed model.

Where Historians Speak About the Future

To conclude, do you have a question for us, as historians? Let me ask a question of the "future history" type. Suppose we all meet again in ten years. What will have changed?

[Some of the replies from the audience:]

The percentage of carbon dioxide in the atmosphere has risen massively, and there are big economic and social problems that we addressed too late.

The use of personal data has improved.

My reply is not an answer, because as historians, we know perfectly well that predictions about the future will remain in the domain of fantasy. For instance, the outbreak of the First World War took everyone by surprise. So, everything that we've said is indeed a possibility, but tomorrow something could happen that invalidates all our predictions.

Editor's note: The reader might appreciate the irony that only a few weeks after these exchanges, Switzerland, like many countries around the world, went into lockdown due to the COVID-19 pandemic.



Fig. 3. Swiss Post drone used for shuttling medical laboratory samples between hospital branches in major Swiss cities (here Lugano). © Swiss Post, www.post.ch/en/ about-us/innovation/innovations-in-development/drones