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CASE STUDY:

Validation in internal talent marketplaces
(ITMs) in Switzerland: the case of Novartis

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Abstract

This case study examines the implementation of an internal talent marketplace (ITM) for skills visibility and deployment at the Swiss company Novartis. ITMs are based on the idea of making employees' skills more transparent to the organisation, in order to be able to deploy them more effectively when and where they are needed, and to identify employees for internal opportunities. They aim to make better use of existing skills in companies to increase agility and retention. A key precondition for the establishment of an ITM at the company was the production of a skills taxonomy, which is a challenging process as companies use different systems for the management of their employees' lifecycle, which may employ different taxonomies. The key validation aspects in ITMs are identifying, documenting of skills, although assessment is also central. By bringing skills demand into a single space, the ITM enables an audit of company skills demand and supply and provides the organisation with internal talent and skills intelligence in a way that was not available before, to inform their recruitment and training decisions. The case study shows how increasing interest in the movement towards skills-based organisations is reflected in the creation of new software and changes in organisational practices to help companies capture the invisible skills, as well as preferences, of their employees. Overall, the case illustrates how ITMs can increase workforce transparency and agility.

1 Introduction

Switzerland is a small export-based economy, highly dependent on foreign trade, in particular with the EU, and the chemical and pharmaceutical industry is by far the leading sector, counting for over 50% of exports -it is followed by machinery, watches and precision instruments¹. Faced with limited natural resources and global competition, the country is highly dependent on innovation and maintaining high levels of productivity.

In this context, Switzerland has traditionally relied heavily on specialist workers, and has experienced even further demand for qualified workers in the current digital transition context². While the country has addressed these needs through immigration of foreign specialists, there is increasing awareness of the risks associated with global competition for talent and to expand and better utilise the existing base of its local labour force. Given the Swiss skills and labour profile, policy has been aimed at creating a general framework in which the skills structure of its population match the needs of the economy and the promotion of innovations to raise productivity, areas in which Switzerland has an extensive track record and is highly regarded internationally³.

While difficulties in the recruitment of talent eased during the COVID-19 pandemic, several indicators suggest that they have returned to pre-pandemic levels in many European countries⁴, while debates around global talent shortages have also increased. Recruitment and retention are two strategies to deal with shortages, but a further strategy, directly associated with validation, is better skills deployment. 'Internal talent marketplaces' (ITMs) or internal skills markets aim to achieve this as a central part of what can be called 'the skills-centred organisation'. These

¹ <https://www.eda.admin.ch/aboutswitzerland/en/home/wirtschaft/uebersicht/export.html>

² <https://www.seco.admin.ch/seco/en/home/Arbeit/Fachkraefteinitiative.html>

³ <https://www.weforum.org/agenda/2019/10/switzerland-economy-skills-workforce-competitive/>

⁴ CEDEFOP (2022) 'Setting Europe on course for a human digital transition: new evidence from Cedefop's second European skills and jobs survey' Luxembourg, Office for Official Publications of the European Union.

organisations aim to change the way they think about work, organising around skills. Some of their practices include, for example, fractionalising work to increase efficiencies, and breaking up silos between their organisational units and their use of staff. Employers thus aim to unlock speed and agility in identifying and using the talent that exists within their workforce and create new opportunities to make existing skills more visible and use them more effectively.

This case study looks at experiences in ITMs, based on the experience of Swiss company Novartis, one of the five largest multinational pharmaceutical companies globally, with an annual revenue close to 50,000 million Euro and over 100,000 employees. Other global organisations in Switzerland using ITM are LinkedIn and Unilever. Given its profile, Novartis' initiatives are highly regarded and trusted socially in Switzerland.

Box 1.1

Novartis is a global healthcare company that uses science and digital technologies to create new treatments in areas of medical need, including cancer, cardiovascular diseases, dermatological conditions, neurological disorders, immune disorders and infections, amongst others. The company thus invests heavily in Research and Development. Its products reach nearly 800 million people globally. About 108,000 people of more than 140 nationalities work at Novartis around the world. The company operates through a network of subsidiaries and offices across the world, and is headquartered in Basil, Switzerland. For more information visit: <https://www.novartis.com/>

Data for this case study was collected through a review of publicly available information on Novartis ITM and talent management, in particular interviews and seminars by:

- Rene Gessenich, Head of Strategic Workforce Planning (Building the skill-centric organisation, how Novartis is leading the way, 2023⁵)
- Rene Gessnich, Head of Strategic Workforce Planning (How Novartis is Building a Skills Operating System for Workforce Planning, 2022⁶)
- Sara Steiner, Global Head of Talent Marketplace (The New Talent Marketplace Model: how a talent marketplace modernises your approach, 2022⁷)
- Markus Graf, VP HR, Global Head of Talent (Stories of Talent Transformation and Impact, 2022⁸)

These provided around 3 hours of recordings, most about Novartis, although they included references and interventions from other companies too. This information was complemented by some additional information by e-mail communications with a member of staff at Novartis. The research team contacted eight Novartis employees globally, but none was available for interview.

⁵ <https://gloat.com/building-the-skill-centric-organization/>

⁶ <https://www.myhrfuture.com/digital-hr-leaders-podcast/how-novartis-is-building-a-skills-operating-system-for-workforce-planning>

⁷ <https://gloat.com/gloat-live-2022/gloat-live-global-2022-watch-on-demand/?wchannelid=4hslktmpgh&wmediaid=amfppg7sgv>

⁸ <https://gloat.com/gloat-live-2022/gloat-live-global-2022-watch-on-demand/?wchannelid=4hslktmpgh&wmediaid=ixa3a2xchm>

2 Rationale

Companies' strategies for managing knowledge and skills have a central role in their business performance⁹. Companies are often unaware of the skills that they have in their workforce¹⁰, and trying different approaches to close this information gap. Some of these emerging approaches include, for example, asking employees to complete skills surveys or skills profiles as part of performance reviews or examining employees' skills from social media sources such as LinkedIn. Similarly, there is evidence that employees are often unaware of internal opportunities, often find about those informally and only a minority of those seeking a new role look at their employer first¹¹. Internal marketplace strategies are rapidly evolving and being promoted as the future of talent management, changing the way organisations think about work (by fractionalising it for increased efficiency), the workforce (by unlocking greater potential and value), and the workplace (by breaking down silos).

The present validation example is directed to people at work. ITMs are based on the idea of making employees skills more transparent to the organisation, in order to be able to deploy them more effectively when and where they are needed, and to identify employees for internal opportunities. They can be used to deploy workers to projects or experiences promoting internal mobility and the use of skills across the organisation.

ITMs can also be an important component of retention and professional development strategies, because the intention of these systems is that employees are able to better deploy their full range of skills and ITMs can provide options for career growth, through internal mobility and skills development and recognising the value of experiential learning. Some researchers have associated their use with increases in job satisfaction and engagement¹², and because managers may be more aware of workers' possibilities to move within the company ITM has also been linked to more regular communication between managers and workers. LinkedIn has reported that employees in companies with better internal mobility stay almost twice longer¹³. French company Schneider Electric is an example of a company that implemented ITM as a strategy to reduce the number of employees leaving as a result of a perceived lack of internal growth opportunities¹⁴. For the company ITM can help to spread knowledge and integration within the company. Unilever and MasterCard provide other examples of companies using ITM¹⁵, with Unilever estimating that its ITM has helped them to re-prioritise hundreds of thousands of

⁹ Hansen, M., Nohria, N., and Tierney, T. (1999) 'What's your strategy for managing knowledge?' Harvard Business Review, 77(2), 106.

¹⁰ <https://www.mercer.com/content/dam/mercera/attachments/private/ql-2021-mercera-gain-a-skills-edge-pov.pdf?clr> [checked on 07/07/2023]

¹¹ Smith, L., Kohn, J. and Pilewska, I. (2022) 'What stops employees from applying for internal roles?' Harvard Business Review. <https://hbr.org/2022/05/what-stops-employees-from-applying-for-internal-roles> [checked on 03/04/2023].

¹² Cowgill, B., Davis, J.M.V., Montagnes, B.P., Perkowski, P. and Hammer, B. (2023) How to design an internal marketplace. Harvard Business Review, May-June 2023. Available from: <https://hbr.org/2023/05/how-to-design-an-internal-talent-marketplace> [checked on 29/07/2023]

¹³ LinkedIn (2021) Workplace Learning Report. https://learning.linkedin.com/content/dam/me/business/en-us/amp/learning-solutions/images/wlr21/pdf/LinkedIn-Learning_Workplace-Learning-Report-2021-EN-1.pdf [checked on 05/06/2023]

¹⁴ <https://gloat.com/customer-stories/how-schneider-electric-increased-employee-retention/> ; <https://gloat.com/wp-content/uploads/How-Marketplace-Dynamics-Will-Power-the-Future-of-Skills.pdf> [checked on 22/07/2023]

¹⁵ Cowgill et al. (2023) How to design an internal marketplace. Harvard Business Review, May-June 2023. Available from: <https://hbr.org/2023/05/how-to-design-an-internal-talent-marketplace> [checked on 29/07/2023]

staff working hours¹⁶. Gloat, Fuel50, SAP or Hitch are some of the vendors in this space.

ITMs can take different forms, functioning like social network sites where managers (who browse listings) and workers (who browse job offers) converge to find matches and notifying those to both parties. But they can also take less “personal” forms, whereby candidates create their profiles, browse jobs and rank their preferred assignments; these choices are then used by algorithms to suggest placements to them¹⁷. In the education sector, Teach For America has been reported to use an algorithm to match teachers with schools on the basis of preferences submitted by principals and teachers. Eighty-eight percent of participants preferred the algorithm's matches to previous placement mechanisms. Retention increased by as much as 12%¹⁸.

3 Basis for the validation arrangement

This practice is not directly based on a regulation or public initiative to stimulate the take-up of validation. It is a voluntary approach that can be adopted by different types of organisations (public, non-profit, private), although it has so far been primarily used in the private sector. As detailed below in this case study, in the marketplace, the main validation phases are identification and documentation of skills, together with assessment, although certification is also possible. The initiative does not have explicit connections to NQF of formal education standards.

4 Approach

The approach that Novartis has adopted to becoming a skills-based organisation is premised on the construction of a ‘skills operating system’, within the company and within which its ITM is included. Novartis found through internal employee and exit surveys that in 2020/21 around 80% of its employees lacked visibility of career opportunities outside their domain, whereas two thirds thought that their career development depended on their manager and half were unaware of the skills that they needed to develop¹⁹. In 2021 tested and 2022 rolled out the deployment of its ITM. In the third quarter of 2022, the company reported that almost 30,000 employees were using the system²⁰.

This skills operating system relies on the existence of a skill taxonomy that is now common for all company HR functions. This skills taxonomy provides the bases for the internal skills marketplace. The construction of a company-wide skills taxonomy can be a challenge, as companies use different systems for the management of their employees’ lifecycle, which may employ different taxonomies. This was also the case at Novartis, making the move towards a skills-based organisation challenging. Different taxonomies may co-exist and operate in their:

- talent acquisition/ recruitment,

¹⁶ <https://gloat.com/customer-stories/how-unilever-upskilled-for-the-future/>

¹⁷ Ibid.

¹⁸ Cowgill et al. (2023) How to design an internal marketplace. Harvard Business Review, May-June 2023. Available from: <https://hbr.org/2023/05/how-to-design-an-internal-talent-marketplace> [checked on 29/07/2023]

¹⁹ <https://gloat.com/gloat-live-2022/gloat-live-global-2022-watch-on-demand/?wchannelid=4hslktmpggh&wmediaid=amfpgg7sgv> [checked on 07/07/2023]

²⁰ <https://gloat.com/gloat-live-2022/gloat-live-global-2022-watch-on-demand/?wchannelid=4hslktmpggh&wmediaid=ixa3a2xchm>

- talent management (e.g. their talent marketplace, learning experience platform, and human capital management solutions) and
- rewards systems.

Novartis uses Workday²¹ as the backbone of its HR management with Gloat²² as talent marketplace and Edcast²³ as learning experience platform. These different HR functions traditionally operate in silos with their different skills taxonomies. The use of an underlying taxonomy aims that, from a user perspective, workers can now go to a system and add their skills, and that this information is translated to other HR systems. An underlying skills typology can also be used to facilitate other tasks, such as procurement or the deployment of contingent labour. The development of a common language about skills thus facilitates the operation of internal marketplaces. Then the different systems for talent acquisition, management and reward can be adapted to that typology. As noted by the WEF a common skills taxonomy can enable more effective collaboration between stakeholders (learners, providers, policy-makers and employers²⁴). But it can also help coordination within their own organisations, as the existence of different taxonomies does not only take place between different types of stakeholders but also, as discussed here, within companies themselves.

Each company has the option of developing its own taxonomy, use an already available taxonomy or a combination of both. In Novartis' case, a combination of both was used for the establishment of their skills taxonomy²⁵. They employ a typology from vendor Lightcast, which covered most company needs, but there was also a degree of customisation and adaptation, in which employees are involved through 'crowdsourcing', as they can suggest new skills to be added to the taxonomy. A 'skills architect' at the company curates the taxonomy. Using a typology from an external vendor had the advantage for Novartis that it allowed comparison and benchmarking with competitors.

Skills demands change so rapidly in the pharmaceutical industry due to changes in technologies, business models or the creation of new products, that it is not possible or desirable to operate the system manually, detailing and continuously updating the skills that the organisation needs manually. As such, on the matching side, ITMs are generally hosted on a technology-enabled platform, which connects employees, by mapping their capabilities, with opportunities within the organisation. The matching process is undertaken by Novartis associates (employees) and managers.

"From an associate and management perspective it [the internal talent marketplace] is clearly the heart. It is clearly where you go when you want to get work done as a manager and that is not only true for projects and gig but also for full time positions now". –Rene Gessenich, Head of Strategic Workforce Planning, Novartis²⁶.

While there is staff dedicated to the curation of the skills taxonomy and to the running of the ITM at Novartis, there is no specific profile of the practitioners implementing the matching process, or specific training required to undertake that role. There is no mandate regarding who should use the ITM either or decompose

²¹ <https://www.workday.com/>

²² <https://gloat.com/>

²³ <https://www.edcast.com/>

²⁴ World Economic Forum (2023) Putting Skills First: A framework for Action. WEF.
https://www3.weforum.org/docs/WEF_CNES_Putting_Skills_First_2023.pdf

²⁵ <https://www.myhrfuture.com/digital-hr-leaders-podcast/how-novartis-is-building-a-skills-operating-system-for-workforce-planning> [checked on 21/03/2023]

²⁶ <https://gloat.com/building-the-skill-centric-organization/> [checked on 21/03/2023]

projects into tasks. According to Rene Gessenich, the company does not provide a lot of governance or direction on the use of the ITM, but this is largely self-regulated (a market). It is a self-reinforcing tool, in the sense that the more projects are put in the ITM, more employees will visit it and apply there, making the use of ITM more interesting for managers, and the ecosystem more robust.

In the marketplace, the main validation phases are identification and documentation of skills, together with assessment. The main outcome from participation in the ITM for employees is the visibility of their skills to managers, which can open up new opportunities for participation in work experiences that are related to their preferences and skills profile.

An interesting phenomenon is that AI embedded in ITM can make documentation of skills a prior step to their identification by the individual employee. Indeed, the AI embedded in some ITM systems can look at existing employee related data (therefore documented information that acts as an indicator of their skills and competencies) to matching employees to new projects, without a need for self-reporting of skills. Then, once a match is given to the employee, this can help them reflect on their skills and identify these -and document them in their application for the role, either through self-reporting or through the provision of third-party evidence.

ITM can also help employees be more consistent in the process of identification and documentation of skills. Given that there it enables greater fluidity within organisations, employees' applications for new roles or projects require taking recent skills development -including through new courses or outside of work experiences- into account and making this visible to the organisation, even when skills are not directly related to the current role.

Given the transparency of the system, employees can also self-assess their profile in relation to the opportunities available and their skills requirements, and identify gaps and training needs in order to be able to opt for project roles of their interest in the future. In this process they may also benefit from feedback from the managers dealing with the recruitment side of the marketplace. In other words, the ITM can provide employees with information about the skills that make them more demanded or more 'employable' within their own organisation. Similarly, both the organisation and the employee are able to identify declines in certain skill needs, 'audit' their skills-set and act upon this intentionally, in order to prevent lay-offs. In other words, by bringing skills demand into a single space, the ITM enables an audit of skills demand and provides the organisation with internal skills intelligence to inform their recruitment and training decisions. It is expected that as the concept of internal talent marketplaces evolve, they will go beyond matching people with employment opportunities to providing employees with access to new learning opportunities, such as mentorship, volunteering, and skills building programmes. The case study did not come across information regarding when these possibilities will be offered at Novartis.

Novartis is involved in the assessment of employees' skills and competences²⁷, to then map their profiles to existing and emerging jobs and skills. Novartis employs a variety of data sources and pieces of information to understand the skills available in its workforce -and find out, for example, the share of employees with a specific skill or skillset that may be critical to the company's future. These include the use of a range of data to make employees' skills visible to managers: they use, for example, assessment of cognitive abilities and behaviours through tests, but also AI to look at

²⁷ A number of providers that have begun to use AI language models for skill assessment or related purposes include HireVue, Pymetrics, Plum, Mya, and Harver, although the case study did not find information on what providers Novartis uses, or whether the assessments are done internally through other means.

CVs and make use of publicly available sources, like its employees' LinkedIn, and data from 360 degree performance assessments.

Selection into specific projects can be conceptualised as an assessment process. The new project experience that employees gain thanks to the assignments in which they participate as a result of their involvement in the ITM can be seen as a marker for new competencies, which is portable to other jobs. If the employee moves to another company that employs the same vendor as Novartis for its internal marketplace, the transferability of skills data can be facilitated.

Certification may take place after completion of some of the company training programmes.

As noted, feedback to participants in the marketplace may be provided in the form of a discussion between managers and employees applying for positions. The company also has structured development programmes for its employees, in which the results of the use of the ITM platform can be discussed.

5 Results

Novartis reported that while its use is voluntary and the introduction of the ITM is recent, thousands of employees and managers use it²⁸. The ultimate measurement of how well the system is considered to be performing is the company's achievement of its business targets.

6 Strengths

The main aim of ITMs is to link people and opportunities based on a better visibility of skills supply, regardless of the context in which these have been acquired, and demand by the company. ITMs aim to generate buy-in from employers because they provide them with a more complete view of their employees' capabilities (improving the accuracy of their skills inventories) and enable more efficient use of employees' skills and competencies. They can generate interest from employees because they can open the way to move varied work, further skills development and career advancement. Staff based in different teams or locations can be more easily mobilised, in agile ways, to implement specific projects, tapping into specific staff skills. Making workforce skills visible enables employers to move towards a more 'skills based' organisation. The company argues that in contexts where there is a need to unlock speed, and agility in utilising the talent that exists within the workforce and create new opportunities to make existing skills more visible, or when companies need to restructure quickly through internal mobility programs, internal marketplace technologies can help in employee redeployment, to rapidly meet changing business needs.

ITM can also give impetus to the generation of common skills taxonomies within companies, across different establishments and HR and operational functions, improving transparency and efficiency in human resources management. They allow the outcomes of one validation process to be more easily used in other company contexts²⁹. In the case of Novartis, various methods of assessment are mobilised within ITMs, which help make skills visible.

²⁸ <https://gloat.com/building-the-skill-centric-organization/> [checked on 21/03/2023]

²⁹ See also Cedefop (2023) European guidelines for validating non-formal and informal learning. https://www.cedefop.europa.eu/files/3093_en.pdf

As the concept of ITMs evolves, they can go beyond matching people with employment opportunities to providing employees with access to new learning opportunities, such as mentorship, volunteering, and skills building programmes. ITM can enable organisations to assess their stock of skills to identify gaps with regards to skills that they expect to become more critical for their success in the future, and the employees with skillsets that are closer to the future priority profiles for the company, for development purposes. Skills data from ITM, including data on failed applications, can be used to inform individual skills development and training plans.

7 Weaknesses/ Barriers

There are several difficulties in the implementation of skills marketplaces within companies. First, it requires investment, and related to this a clear business case. Some small companies or those that do not see rapid changes in their skills requirements, for example, may not see a need to clearly codify and monitor the skills needed by the organisation, as their managers and employees may already be clear about those. The larger the workforce the larger the marketplace and job options and likelihood for employees to find a match. This will attract more employees to the marketplace, which will in turn make it more attractive for managers to use. Moreover, large workforces (in the hundreds of employees) are more difficult to manage centrally, increasing the comparative advantage of an ITM.

ITMs tend to work best in companies that are in industries with high worker replacement costs and have a good share of employees who are generalists and tasks that are also generic, because this makes it easier for workers to move, and be able to undertake the required tasks³⁰. Because of this, ITM have been reported to be more popular with workers than with managers, who can fear increased internal competition for their best team members³¹. There is a risk of concentrating the best talent in a small set of “best teams” with the best managers in the company.

ITMs also require a change of mindset, from fixed job roles to the deconstruction of these into tasks and projects, which make skills -and thinking about what skills are required for the delivery of a certain project- more relevant. Rene Gessenich notes that while roles are still a valid unit of analysis for companies, a skills perspective is more granular and more informative for planning purposes than just a job title³². But some employees may prefer to have a clearly and stable description of tasks, rather than a dynamic and agile one.

For Novartis, the skills taxonomy is an important element of their ITM market. This can have advantages, but one of the difficulties is that skills taxonomies are challenging to create. In addition, the meaning of skills within job roles and projects is highly contextual, in particular when thinking about transversal skills -such as project management or communication skills. Setting up a typology that captures the differences in communication skills required by a press officer and an engineer, for example, or different types of project management, can be challenging and require substantial discussion. This sort of granularity, however, may be needed for the typology to be truly useful for the organisation.

There are also technological barriers, in terms of making different systems compatible with the company's skills taxonomy. Small companies may not find it easy to adapt their HR systems to the taxonomies that they develop, and many may

³⁰ Cowgill et al. (2023) How to design an internal marketplace. Harvard Business Review, May-June 2023. Available from: <https://hbr.org/2023/05/how-to-design-an-internal-talent-marketplace> [checked on 29/07/2023]

³¹ Ibid.

³² <https://gloat.com/building-the-skill-centric-organization/>

not have the resources to update them regularly. The Novartis experience shows that the translation between different taxonomies, even after a 'master taxonomy' for translation has been identified, can be difficult. A focus on skills entails a much higher level of detail than a focus on job roles.

The operation of ITMs also needs to consider that skills are not the only factor in matching people to work. Personal preferences about the nature or purpose of the job, location or family circumstances, for example, are other important elements that require consideration.

8 Conclusions

The case study shows how increasing interest in the movement towards skills-based organisations is reflected in the creation of new software and changes in organisational practices to help companies capture the invisible skills, as well as preferences, of their employees. Internal market places are premised on skills transparency within organisations. Particularly the three first stages of validation play an important role in internal labour markets (identification, documentation, assessment), whereas recognition may take different forms and is often not related to certification but to social recognition (for example in terms of the possibility to participate in new projects, or in achieving an internal promotion). This recognition is transferable to other companies, as it becomes part of the employment history of the worker.

The case study also highlights lessons for other organisations. One lesson from the implementation of Novartis' ITMs is that in large and complex organisations such as Novartis implementation of change requires piloting and experimenting, to create outstanding use cases that can gain the support of the leaders of the organisation and lead to wider support and adoption. Associated to this is the acknowledgement that different levels of maturity in the use of ITMs may co-exist within a single organisation. The initiative is transferable, although implementation in the way that Novartis does it requires substantial investment in terms of time and resources.

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