

# AN INTRODUCTION TO STRATEGIC PLANNING FOR THE MEDICAL TRAINEE USING WARDLEY MAPS

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## ABSTRACT

*Background:* This article introduces Wardley Mapping, a visual tool with a long-standing history in business and technology sectors, as a valuable and novel approach for medical trainees navigating the complex and evolving healthcare landscape. Wardley Mapping offers unique methods to visualise and analyse complex systems, aligning well with the multifaceted nature of training and career development.

*How we Did It:* The article illustrates its application through a comparative example of planning a medical school elective. We outline the key components of Wardley Maps, describing the process of creation, present the benefits, limitations, and challenges of applying this tool in the medical education context.

*Learning Points:* We describe key lessons for implementing and refining Wardley Mapping in medical education.

*Conclusions:* Wardley Mapping offers comprehensive visualisation of career components, enabling evolution tracking, facilitating informed decision-making, and offering a holistic perspective. Exciting opportunities for future research include integration into medical curricula and its long-term impact on career outcomes.

**Keywords:** medical education, wardley, career development, innovation, strategic planning

## BACKGROUND

In the rapidly evolving landscape of healthcare and medical education, strategic planning has become increasingly crucial for medical trainees navigating their

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career paths. There is a constant need for innovative approaches that can capture the complexity and dynamism of the medical field. Traditional career planning methods such as SWOT analysis (Steward, Benepe and Mitchell, 1965) or goal-setting frameworks (Kuncheria, 2023) provide a snap-shot evaluation which may fail to reflect changes encountered along the way. Mind maps (Serig, 2011) or Gantt charts (Gantt, 1974) may fail to capture the complexity of processes.

We wished to explore the utility of Wardley Maps in medical trainee strategic planning, as an alternative method to aforementioned traditional approaches. Wardley Mapping was developed by Simon Wardley in the early 2000s (Wardley, 2022; Wardley, 2015). It has a long-standing history in business and technology sectors, though its application in healthcare has been limited to health products (Wardle, 2021). Its role in medical education remains unexplored, presenting an opportunity for innovation in how medical trainees can approach strategic planning.

We tested the applicability of Wardley Mapping, by considering a simple example of planning a medical school elective at a prestigious institution. We compared two strategies: an email approach and a LinkedIn strategy. We set forth to answer these questions: is the process of Wardley Mapping simple and adaptable? Does it offer advantages over traditional strategic planning methods? Are there any limitations in the use of Wardley maps? And how can Wardley Maps benefit the community of medical trainees and health care professionals?

### *METHODS FOR CONSTRUCTING A WARDLEY MAP*

First, we considered several essential elements:

- 1) Value Chain: The sequence of activities that deliver value to the medical trainee.
- 2) Evolution Axis: Represents the maturity of each component, from novel ideas to standardised practices.
- 3) Visibility Axis: How apparent each component is to the medical trainee.
- 4) Components: The individual elements that make up the value chain.

Then we followed key steps in the creation of a Wardley Map:

- 1) Identify User Needs

Define the ultimate goal or “true north” for the medical trainee. In our example, this is to secure an elective placement at a prestigious institution.

- 2) List the Components

Identify all elements required to meet our ultimate goal.

Email Approach:

- Writing a compelling email

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- Sourcing an email list of consultants
- Consultants opening and reading the email
- Consultants accepting the medical student
- Institutional bureaucracy

LinkedIn Approach:

- Create a compelling LinkedIn profile
- Search and identify prospective consultants
- Connect and engage with consultants
- Consultants accepts the request
- Institutional bureaucracy

3) Construct the Value Chain

We arranged the components in a sequence that shows how they fulfil our end goal.

4) Assess Visibility

Determine how visible each component is to us.

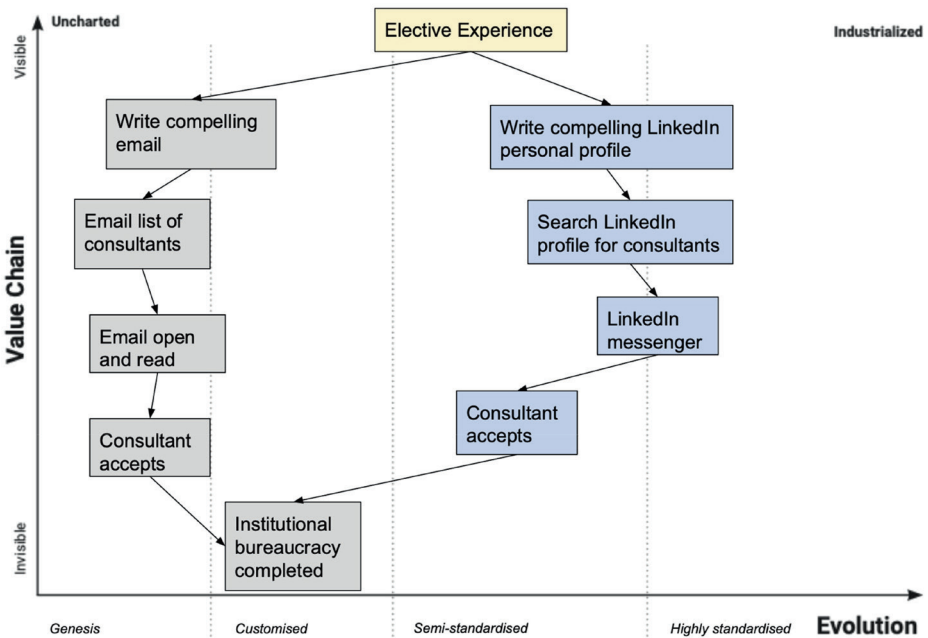


Figure 1. Wardley map for email and LinkedIn approaches in securing an elective placement. Elective Experience is the anchor, or the map’s primary focus. The x-axis of evolution shows how standardised each component is, with ‘genesis’ representing a novel idea, and ‘highly standardised’ representing a widely available and well-understood component. The y-axis shows how visible each component is to the user. The components are linked through the a sequence of events, with the final component leading to outcome for the user



**Figure 2. (Above) Gantt chart showing temporal timeline in planning both email and LinkedIn approaches to scheduling an elective placement. (Below) A mind map showing sequential steps in planning both email and LinkedIn approaches to scheduling an elective placement**

### 5) Map Evolution

We placed each component on the evolution axis based on maturity, or how standardised the process is.

The final construct of our Wardley Map can be seen in Figure 1, where we compare both emailing and LinkedIn approaches. In figure 2, we created a Gantt chart and mind map for our example.

## REFLECTIONS

In comparing our Wardley Map with other traditional approaches to strategic planning, we found several advantages. The process was easy and adaptable for a medical elective, it can also be expanded upon to analyse more complex and dynamic systems. Wardley Maps stands out in its ability to represent both the current state and future evolution of career components.

By mapping individual components on a Wardley Map, we could visualise the differences in visibility, evolution, and potential effectiveness of different approaches. The email approach is positioned earlier on the evolution axis, representing a more traditional and less standardised method. The map can indicate to us potential challenges and uncertainties; using the email approach may result in low success rates and unpredictable outcomes. In contrast, the LinkedIn approach was placed further along the evolution axis. The associated processes are semi-standardised, with high visibility through profile structures and messaging functionality. This approach can lead to higher success rates in securing elective placements and long-term mentorship opportunities.

However, the Wardley map is not a static final product, individual processes or even the entire value chain can be improved upon. Wardley Doctrines (Hired Thought, 2020) can be applied to individual processes to mature, standardise and improve the evolutionary chain. We then tested how these doctrines can be applied to our example, two of which are listed below:

- 1) Challenge Assumptions: Regularly review and update email templates to ensure they remain engaging, relevant, and effective in capturing the attention of consultants.
- 2) Strategic Improvement: Peer to peer development of a comprehensive database of elective locations, combine efforts to aid collective decision-making.

When applied to the broader context of medical career planning, we noted potential pitfalls in using Wardley Maps.

There's an inherent subjectivity in component placement, and complex systems may be challenging to represent fully. There's also a risk of oversimplifying nuanced situations, a learning curve for new users and the potential for misinterpretation without proper guidance. Common misperceptions could include viewing Wardley Maps as static documents rather than evolving tools and over-relying on maps without considering external factors. To minimise these limitations, we encourage users to engage in regular peer review, regular updates of their maps and consider multiple perspectives.

The utility of Wardley Maps can be extended to the broader context of education and professional planning, several advantages stood out to us:

- 1) Comprehensive visualisation: It visually represents all components in a trainee's career value chain, enabling a deeper understanding of how different elements interact and evolve.
- 2) Evolution tracking: The mapping process allows trainees to anticipate, prepare and adjust for changes in their field.
- 3) Informed decision-making: Wardley Maps can facilitate complex strategic decision-making by highlighting dependencies between components and their relative importance at different career stages.

- 4) Holistic perspective: The mapping process encourages trainees to consider how their individual goals fit into the broader healthcare ecosystem.

The steps needed to construct a Wardley map can be expanded upon to suit more complex examples such as to construct a revision roadmap, or by supervisors to help trainees in structuring a career pathway. In a medical education context, components might include clinical skills, research experience, networking. Elements like exam scores are highly visible to trainees, while others, such as a training programme selection processes, are less apparent. Enrolling in a basic sciences course is a standardised commodity, while publishing an article in an emerging field could be in the genesis or custom-built stages.

Unlocking the potential of Wardley Mapping in health professional education presents an array of outstanding questions, inviting future exploration and discovery:

- 1) How can Wardley Mapping be integrated into formal medical education curricula?
- 2) What might be the long-term impact of using Wardley Maps on career satisfaction and success in medicine?
- 3) How can Wardley Mapping be adapted to address the unique challenges of different medical specialties?
- 4) Could Wardley Mapping be used to improve strategic planning at an institutional level in medical schools and teaching hospitals?

When utilised fully, Wardley Mapping may offer opportunities for innovation in strategic planning within the broader sphere of medical education and healthcare. It can facilitate medical trainees to make more informed decisions, anticipate changes in their field, and create effective strategies for achieving their professional goals.

## TAKE HOME POINTS

Wardley Mapping is easy to use, highly adaptable in the context of medical education and career planning. The potential gains from applying Wardley Mapping to medical education are significant.

We offer some pearls of wisdom through our exploration:

- 1) Start Simple: Begin with small, well-defined aspects of your medical education or career planning. As you become more comfortable with the technique, you can tackle more complex scenarios.
- 2) Collaborate: Share your maps with peers, mentors, and advisors. Their perspectives can provide valuable insights and help refine your strategy.

- 3) Iterate: Regularly revisit and update your maps. The medical field is dynamic, and your maps should reflect changing circumstances and evolving goals.
- 4) Integrate with Other Tools: Use Wardley Mapping in conjunction with other career planning tools and frameworks for a comprehensive approach.
- 5) Focus on Evolution: Pay particular attention to how different components of your medical education and career are evolving. Apply Wardley doctrines to mature and standardise individual components. This will help you anticipate changes and position yourself advantageously.

Additional resources for those interested in exploring Wardley Mapping further include Simon Wardley's book and blog posts (Wardley, 2022; Wardley, 2015), online communities and forums for Wardley Mapping practitioners (Discourse, 2024; Github, 2024) and workshops or courses on strategic planning.

Investment in the learning and practice of Wardley maps can offer insights to enhance a medical trainee's ability to navigate their career path successfully. As the healthcare landscape continues to evolve rapidly, innovative tools like Wardley Mapping can be valuable in helping medical professionals adapt and thrive in their careers.

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## **CONFLICT OF INTEREST**

The authors declare no conflicts of interest.

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