

Z21 Innovation Fund

Technical Guidance for Applicants

April 2018

1.0 The Fund – Z21 Innovation Fund

Over the last decade billions of people's lives around the globe have been changed through opportunities unlocked by the World Wide Web. Facebook, Uber and Airbnb are just a few of an increasing number of billion dollar 'unicorn' startups that are demonstrating incredible growth and wealth creation.

The University of Southampton (UoS) is home to some of the most talented students, researchers and academics in the world. It benefits from cutting edge facilities and has a history of commercialising the intellectual property (IP) generated through its research. These connections, talents and facilities along with its south coast location and proximity to London are the perfect ingredients to grow a fast-paced entrepreneurial culture, spawning the next generation of high growth tech startups in the Solent region.

The Web Science Institute (WSI) is the interdisciplinary institute within the University focused on bringing together knowledge not only on the underpinning technologies associated with the Web, but also the social and organisational behaviours of the Web users. Through the vision of Professor Dame Wendy Hall, Director of WSI, and entrepreneur Tom Barnett, Chair of the WSI Advisory Board, the Z21 Innovation Fund sprung from these fertile conditions, and aims to capitalise on the ever-growing potential of the Web. The Solent Local Enterprise Partnership (LEP) shares this vision and is investing in the Z21 Innovation Fund along-side the Web Science Institute and the University to accelerate the growth of the entrepreneurial Web eco-system in the Solent LEP area.

1.1 Objectives of the Z21 Investment Fund

The Z21 Innovation Fund is a collaborative activity of the Solent Local Enterprise Partnership (LEP) and the University of Southampton. The LEP has invested £500,000 and the UoS is investing a similar amount of in-kind resources of expertise, knowledge, support, and facilities. The primary objectives of the Z21 Innovation Fund are:

- Identify projects originating within the WSI/UoS which have commercial potential,
- Accelerate projects to being investable commercial spin-outs,
- Assist the spin-outs to secure substantial investments as quickly as possible,
- Assist the spin-outs to grow revenues as rapidly as possible,
- Assist the spin-outs to grow gross value added (GVA) and create high tech jobs in the Solent LEP region

The plans and expectations for the Z21 Investment Fund are to support at least 16 Web Science projects to develop their minimal viable products (MVPs). From these projects, at least 4 new companies will be created that are investment ready. These new companies will raise first round investments, set up their operations in the Solent region, and begin trading. These companies will grow their commercial operations creating at least 40 new jobs in the Solent region.

1.2 Operating Structure of Z21

The operation of Z21 is a process to best accomplish the objectives of Z21 to identify projects which have commercial viability, accelerate the best of these projects to be investible, and create high growth companies in the Solent region

- Staff and students within the UoS who are currently or wish to be associated with WSI and have projects that hold potential commercial viability will make application to Z21 for an MVP Development Grant.
- The Z21 Grant and Investment Panel (Z21 G&I Panel) will evaluate the applications and select projects that will receive an MVP Grant of up to £6,300.
- Project teams will have 3 months upon receiving the MVP Grant to develop a minimal viable product which will be presented to the Z21 G&I Panel.
- The Z21 G&I Panel will select the projects which it believes have the greatest potential to become a successful spin-out company, and these projects will progress to the Pre-seed Grant stage of the Z21 process. These selected commercialisation projects will receive up to £31,500 from the Z21 Innovation Fund to progress their MVP to an externally investible spin-out.

1.3 MVP Development Grant Stage

The MVP Development Grant is up to £6,300 of funding combined with a broad offering of valuable support from WSI, Future Worlds and UoS to develop the project idea into a minimal viable product. Key features of the Z21 MVP Grant stage are:

- It is a mandatory pre-requisite for the Z21 Pre-Seed Grant.
- Projects receive a grant of up to £6,300 and project support from Future Worlds. The funding will be managed through the University's standard financial systems which enables the Z21 Coordination Manager to check eligibility of expenditure prior to authorisation of spend.
- It will be open for applications at least twice a year while the fund is active.
- Applications are through a completed application form (the questions of which are in section 3.0 of this guidance) and smartphone video pitch.
- Each project will need to produce a tangible output, prototype or demonstrator and associated feasibility study. Applicants will need a budget of the costs involved to deliver this output.
- Interviews are conducted by the Z21 G&I Panel who will reject the application, request further information or offer a MVP grant in return for a commitment from the applicant(s) to achieve a number of specified objectives/milestones/deliverables.
- The grant period is 3 months. No expenses after this period will be allowed without formal agreement from the Z21 G&I Panel.
- At the end of the period the candidates will present to the Z21 G&I Panel.

Once the Z21 MVP Grant has been awarded the team will progress the MVP project over the following 3 months. The team will be supported and the MVP project progress monitored throughout the 3 month grant period.

The grant period of 3 months is purposely chosen to be aggressive as it will test the team's ability to work hard, smart and fast to achieve the goals set by the Panel. The package offered is a

combination of up to £6,300 funding and the acceleration support which will be provided by Future Worlds and the wider University:

1. Development of value proposition.
2. Introductions to mentors and experts.
3. Use of Faculty Maker Space.
4. Use of IT and University infrastructure.

Within the University, the Web Science Institute (WSI) will provide expert advice driven by their deep understanding of how the Web is shaping the world around us. The University's on-campus startup incubator, Future Worlds, will provide project assistance through coupling with the marketplace, development of value propositions, product/market fits and opportunities for mentoring.

Within the Faculty of Physical Sciences and Engineering at the University of Southampton, the WSI, led by Professor Dame Wendy Hall, brings together world-leading interdisciplinary expertise to tackle the most pressing global challenges facing the Web today. Students, researchers and staff from the WSI will represent an important part of the pipeline that will feed the Z21 Innovation Fund and support the projects which are accelerated by it. The WSI will be the financial home of the Z21 Innovation Fund and the Z21 WSI Coordination Manager will administer the grant in terms of reporting, expense administration and arranging panel dates.

All funding is to provide support which will allow the projects to create the prototypes/demos/feasibility studies that will enable a business case for commercialisation, and therefore any project will need to set out what Z21 is buying in the initial stage (this will be, for example, a completed feasibility study for x, or a prototype for y, etc.) and these outputs will need a monetary value with supporting detailed budget.

It is recognised that the development costs associated with producing a prototype/demo/feasibility study may include research time and/or professional fees as well as other costs including consumables, equipment etc. to develop the output. These costs need to be monetised and evidenced as part of the budgeting of the output that any Z21 funding award goes to support. For clarity day to day living costs are not eligible under this funding. All eligible expenses will require approval by the University prior to payment.

At the end of the Z21 MVP Development period all projects will present their results to the Z21 G&I Panel and provide evidence of whether the milestones set have been reached. They will demonstrate their MVP as part of this process as well as a roadmap for further development, launch and market traction. Teams will state whether they wish to be considered for Z21 Pre-Seed funding. In some cases, teams may have themselves realised during the Z21 MVP Development period that the product, market or team are no longer viable.

1.4 Pre-Seed Grant Stage

The Pre-Seed Grant stage is for those projects which the Z21 G&I Panel believe have the greatest potential to become high growth spin-out companies to progress the development of their products and business plans, in order to become investible. In the late part of this stage successful projects will be set-up as spin-out companies.

An investment of up to £31,500 along with the support provided by WSI, Future Worlds, and other University services and facilities will be made to the project in return for an 8% equity stake in the

subsequent spin-out company (in exceptional circumstances the Z21 G&I Panel may propose an alternative equity stake between 6-12%).

Z21 Pre-Seed Investment will not be appropriate if the MVP project has already attracted investment interest and the team wish to pursue that separately from Z21. The purpose of the Z21 Pre-Seed Grant is to help the projects to further develop products to be market ready and to achieve product market fit, traction and ultimately close a round of seed investment. The features of the Z21 Pre-Seed Grant are:

1. Invested projects will receive up to £31,500 funding and acceleration support in return for 8% equity.
2. Standardised legal paperwork including grant contract, shareholders agreement, articles, and IP agreement or waiver will be created and used.
3. Companies will be formed at the appropriate stage and costs of formation is an eligible use of funds. It is anticipated in most cases the companies are most likely to be formed towards the end of the 6-month period (at between 4-6 months) but it could be after the end of the pre-seed funding stage
4. The target time from decision to paperwork being signed will be no longer than 1 month.
5. The investment will be released in three tranches. The first tranche will be released on signing of the investment contract, and the other two against achieving agreed milestones determined by the Z21 G&I Panel. The funding will be managed through the University standard financial systems which enables the Z21 Coordination Manager to check eligibility of expenditure prior to authorisation of spend.
6. The acceleration support will be provided for 6 months and will have a clear goal of helping the ventures attract a round of seed investment.
7. After the 6-month period, the projects will present at a Z21 Demo Day to investors.
8. Z21 startups will have the potential to join the SETsquared Incubation and University of Southampton Science Park programmes and/or locate in these centres.

Once the Z21 Pre-Seed Grant has been awarded the team will progress the MVP project over the following 6 months. The team will be supported and the project's progress monitored throughout the 6 months period.

The package offered is a combination of up to £31,500 funding drawn down over three tranches against set milestones and the following acceleration support which will be provided by Future Worlds and the wider University.

1. Further support developing the value proposition and business.
2. Continued mentor and expert introductions.
3. Help with strategy for gaining market traction.
4. Use of Faculty Maker Space.
5. Scripting, editing and filming of a professional pitch video.
6. Promotion of pitch video on futureworlds.com and social platforms.
7. Introductions to angel and VC investors.
8. Use of IT and University infrastructure.
9. SETsquared Incubation and University of Southampton Science Park acceleration programmes.
10. Business planning support.

All funding is to provide support which will allow the projects to create the prototypes/demos/feasibility studies that will enable a business case for commercialisation to be taken to investors and therefore any project needs to set out what Z21 is buying in the initial stage (this will be, for example, a completed feasibility study for x, or a prototype for y, etc.) and these outputs will need a detailed budget attached to them.

It is recognised that the development costs associated with producing a feasibility study/prototype/demo may include research time and/or professional fees as well as other costs including consumables, equipment etc. to develop the output. These costs need to be monetised and evidenced as part of the costing-up of the output that any LEP funding managed by Z21 goes to support. For clarity day to day living costs are not eligible under this funding.

The cash component can be used to cover a number of areas of expenditure to meet the needs of the Z21 projects. All expenses will go through the University and be subject to usual University financial regulations including for procurement, travel and expenses guidelines and visa restrictions in case of foreign personnel. The Z21 Coordination Manager will assist teams in purchasing and procurement. If projects do not fully utilise the funding this will be returned to the Z21 Innovation Fund.

2.0 Eligibility Criteria

The objectives of Z21 are to create a number of new high growth businesses in the Solent region, coming from the creative environment of the University's WSI. Applicants are encouraged to demonstrate the direct creation of new sustainable private sector full time jobs in the Solent region. Bids which demonstrate that they create a higher number of new jobs directly will be considered stronger. It is strongly recommended that potential applicants check that they will situate their subsequent spin-out company in the area eligible for funding before applying. To confirm whether or not your proposed business location is within the Solent area, please refer to the website at: <http://www.solentgrowthhub.co.uk/>

It is the responsibility of the applicant(s) to confirm that their activity within the Fund is compliant with any visa restrictions they may be under.

Key criteria:

- a) The lead applicant must be a student, researcher or academic within the University of Southampton.
- b) The founding team must be able to commit to the project for a minimum of 3 months. Before applying, it is advised that you discuss your application with your supervisor/tutor/line manager to ensure that the project timing is compatible with your work/studies.
- c) The IP behind the idea must be owned by the founding team or the University.
- d) The idea must be related to the Web in some way (e.g. Web Science, Digital, AI, IoT) and therefore associated to WSI.
- e) The idea must have a clear advantage over competitors.
- f) The team must be able to demonstrate an MVP within 3 months.
- g) The idea must be able to gain users and market traction within 9 months.
- h) The project resources (whether funded or in-kind) must be appropriate to achieve the success of the MVP.

- i) All submitted applications will be required to undergo a due diligence review. Applicants will need to satisfactorily complete the process before funding is awarded, subject to contract.
- j) It is the responsibility of the applicant to confirm that their activity within the Fund is compliant with any visa restrictions they may be under.

You may also wish to consider the HMG independent [report on AI](#), and the Grand Challenges section of the [Industrial Strategy](#).

All applications will be evaluated by the Z21 G&I Panel. Final decisions on the applications to be supported by the Z21 MVP Grant Fund will be made by the Z21 G&I Panel and decisions taken by the Panel in relation to which projects to support are final and there will be no right of appeal.

3.0 Application for MVP Stage

All applicants for the Z21 Investment Fund MVP Grant must answer the following questions by completing the MVP Application Form and provide a 3-minute video introducing the project team, its technology and commercial idea.

Overview

- 3.1 Project name
- 3.2 Project URL, if any
- 3.3 List the Team: name, email address, position (UG student, PGT student, PGR student, University staff, external), faculty (if applicable), course (if applicable), supervisor / tutor / line manager (if internal), time commitment per week to MVP stage (up to 10 h/w, up to 20 h/w, up to 40 h/w, full) **(list items)**

Idea

- 3.4 URL of a 3-minute video introducing the founders, the project, the technology and the plan
- 3.5 What is your project going to make? **(100 words)**
- 3.6 How do you know people need what you are planning to make? **(75 words)**
- 3.7 What's new about what you are making? **(50 words)**
- 3.8 Describe the technology on which this project is based **(50 words)**

Location

- 3.9 Describe the area your idea is focused on: (e.g. Web Science, Digital, AI, IoT)? **(50 words)**
- 3.10 Where do you live now? Where would you plan to base your spin-out? **(25 words)**

Intellectual Property

- 3.11 Who came up with the idea for the technology? **(25 words)**
- 3.12 Has any of the IP (code and/or designs) been created by someone who is not one of the team members? If so, how can you safely use it? (Permissive open source is ok, of course.) **(50 words)**
- 3.13 List any and all Intellectual Property used that has been derived from any University research and the funding source for the research **(list items)**

- 3.14 Were any companies involved in the project or are any of the team members covered by non-competes or intellectual property agreements that overlap with your project? Will any be working as employees or consultants for anyone else? (100 words)
- 3.15 List anyone outside the team who will be involved in the startup, if and when it is formed (name, internal / external to the University, proposed involvement in the startup) (list items)

Market

- 3.16 What is your target market and how big is it? Provide the evidence of demand for your product. (75 words)
- 3.17 What substitutes do people resort to because it does not exist yet (or they don't know about it)? (75 words)
- 3.18 Who are your competitors, and who might become competitors? Who do you fear most? (50 words)
- 3.19 What do you understand about your targeted business/marketplace that existing companies in it just don't get? (50 words)
- 3.20 How will you get users? If your idea is the type that faces a chicken--and--egg problem in the sense that it won't be attractive to users until it has a lot of users (e.g. a marketplace, a dating site, an ad network), how will you overcome that? (75 words)

Monetisation

- 3.21 How do you or will you make money? (100 words)
- 3.22 How much could you make over the next 3 years initially and then beyond? (We realize you can't know precisely, but give your best estimate) (75 words)

Project

- 3.23 If you have already started working on it, how long have you been working and how many lines of code (if applicable) have you written? (50 words)
- 3.24 If you have an online demo, what's the url? (Don't password protect it; just use an obscure url)
- 3.25 Do any team members have other commitments in the following 9 months? (50 words)
- 3.26 Please provide an initial budget and plan of how you intend to use the MVP funding (150 words)
- 3.27 Please outline what non-financial support Z21 can provide that would most benefit you. (100 words)

Team

- 3.28 Why did you pick this idea to work on? Do you have domain expertise in this area? (75 words)
- 3.29 Please outline the team's background and capability, including work experience in case of students (150 words – whole team)
- 3.30 Please tell us about the most impressive thing other than this potential startup that each team member has built or achieved (75 words – whole team)

4.0 Assessment Criteria for the MVP Stage Applications

- 4.1 Founding team must be visionary and ambitious - team risk.

- 4.2 The idea should be compelling, feasible and solve a real problem - product risk.
- 4.3 The market should be growing and the product able to scale quickly - market risk.
- 4.4 The idea should be capable of returning 10 times any later investment - return risk.
- 4.5 The venture must have the potential to create jobs in the Solent area - KPI risk.
- 4.6 The team themselves must be capable of reaching MVP stage - execution risk.
- 4.7 A prototype, however early, should exist and be demonstrated - execution risk.
- 4.8 The team should be receptive to critical challenge and ready to pivot if required - team risk.
- 4.9 The Z21 stakeholders should have relevant expertise in their networks - execution risk.
- 4.10 The idea must be related to the Web in some way (e.g. Web Science, Digital, AI, IoT) - KPI risk.
- 4.11 Clear access to necessary intellectual property – legal risk.
- 4.12 Viability of project against budget and in-kind support – execution risk.

5.0 Application for the Pre-Seed Grant Stage

At the completion of the MVP Stage, each of the teams will make a pitch to the Z21 G&I Panel. The pitch will comprise 13 slides, together with explanatory notes, based upon the following template:

- 5.1 Cover. Include your logo, tagline, and complete contact information.
- 5.2 Summary. Summarise the key, compelling facts of the company.
- 5.3 Team. Summarise the key compelling facts about the team.
- 5.4 Problem. Describe the customer, market, and problem you address, without getting into your product. Why are competitors not able to satisfy the need?
- 5.5 Solution. Introduce your product and its benefits and describe how it addresses the problem you just described. Include a demo such as a screencast, a link to working software, or pictures.
- 5.6 Technology. Describe the technology behind your solution. Focus on how the technology enables the differentiated aspects of your solution.
- 5.7 Intellectual Property. Summarise the key Intellectual Property involved in your solution, who owns it and what gives you the right to use it. Are there patents?
- 5.8 Marketing. Who are the customers? How big is the market? How are you going to acquire customers? What evidence of market demand do you have?
- 5.9 Monetisation. What's your business model, what are your expected costs, how will you create revenue and/or value in your business?
- 5.10 Competition. What substitutes or competitors do people resort to because your technology doesn't exist yet? Why would people use yours instead?
- 5.11 Milestones. What did you achieve during the MVP Grant stage, and what will you achieve during the Pre-Seed Grant stage? Outline a roadmap for the next 18 months for your product, team, marketing, and sales.
- 5.12 Conclusion. Outline a vision of what the company could accomplish if these current plans are realised, or a rehash of the Summary slide.
- 5.13 Financing. Provide a breakdown of how you intend to use the cash and non-financial support during the Pre-Seed Grant stage and the likely revenues it might generate.

The intention of the MVP Stage is for teams to aim to progress to Pre-Seed Stage. Therefore, in exceptional circumstances, if at the completion of the MVP Stage a team does not want to be considered for the Pre-Seed Stage and does not pitch to the G&I Panel, they may be requested to repay the funding received during the MVP Stage.

6.0 How funds can be used

Parts: some ventures, for example, Web connected IoT devices, may require parts to be purchased, in order to meet the Pre-Seed Grant milestones set by the Panel.

Equipment: some ventures may require equipment to be purchased, for example cameras, computers and servers. Any such equipment will be purchased through the University systems and owned by it in the first instance. For unsuccessful Z21 Pre-Seed Projects or those that do not progress to company formation the equipment will be retained and used for future Z21 Projects unless otherwise agreed by the G&I Panel. For projects which progress to company formation the equipment may be transferred at nominal cost with agreement of the G&I Panel.

Marketing: if the Panel sets traction based milestones, projects may require marketing services (for example Facebook paid advertising).

Services: with the increase of cloud based computing, many ventures may choose to purchase cloud services such as AWS. However, all Z21 projects will have access to free Google Cloud credits.

Travel: in the case where the Panel sets a customer acquisition based milestone, or trips to experts and advisors are necessary, then travel costs are likely to be claimed.

Contracting: if there is a non-core element of development that can be contracted to a third party, for example to a Web designer or other freelancer, then this would be a reasonable expense.

Legal and tax advice: costs associated with the formation of the company and similar expenses.

IP Protection costs: costs associated with obtaining trademarking and patent filings (if applicable) or other IP protection costs and/or freedom to operate searches up to £7,000.

VAT: VAT (if applicable) must be accounted for correctly and included in the total project costs unless it can be reclaimed.

PhD secondment: where an MVP project is furthering outcomes and IP from a PhD project potentially this funding may be used to support the creation of prototypes/demos/feasibility studies that will enable a business case for commercialisation. If this required the suspension of studies for a period it would be subject to supervisor's and home Faculty's approval thus allowing the student to focus on MVP whilst continuing to use facilities and receive support from their expert supervisors. The grant cannot be used to cover day to day living costs.

7.0 Terms and Conditions

University of Southampton standard policies apply to the Z21 Investment Fund programme. Depending upon the team members' employment status and origin of the background IP, additional terms and conditions may apply.

8.0 Contact Information

If you have questions about the overall Z21 Investment Fund, its objectives and operating structures, contact:

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If you have questions about the Application for the MVP, the stages of the Z21 Investment Fund, the eligibility criteria, and the operating processes contact:

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