Working Paper # 69

NUST Research and Innovation Digital Media Policy

Sponsored by Research Dte

Introduction and Rationale

- 1. With a mission to be a research-led university, NUST has rapidly developed a vibrant research ecosystem consisting of world-class researchers, facilities, stakeholder engagements and administrative support systems. NUST Research and Innovation promotion, under the umbrella of Research Directorate, is a platform where research and innovation related interactive content is provided for promotion through digital media on dedicated platforms such as Website, Blogs, Newsletters, Twitter, Facebook etc. News & interesting snippets of research and innovation happening at NUST are disseminated to the community of scholars worldwide. These news stories will include but are not limited to top research projects, publications, patents, tech-transfer, lab development, creative economy and social contributions.
- 2. Currently, NUST Research and Innovation activities are being promoted using following digital platforms for wider dissemination:

S. No.	Name of platform	Content
a.	Research Directorate website	Upcoming events, seminars, workshops, research collaborations, achievements & NUST research statistics
b.	Research Blog site	Blogs on current NUST research, applied projects, commercialized intellectual property (IP), tech-transfer of NUST IPs to the industry, lab facilities, faculty achievements, workshops / conferences / seminars, sustainability related solutions and events.
c.	Research & Innovation Newsletter	University Rankings, current NUST research, innovation and commercialization, tech transfer, sustainability, conferences/workshops, opinion blogs and outreach activities
d.	Social media (Twitter, Facebook and LinkedIn)	Research articles published, applied projects, research grants won, inventions, faculty achievements, tech-transfers of IPs, NUST collaborations (foreign & domestic) and Memorandum of Agreements (MoAs).

3. Promotion of Research and Innovation activities is in practice since 2019. However, no policy document exists. Thereby, the policy has been formulated to expand the promotional horizon and visibility of NUST and faculty members in particular within the country and abroad for coming up at par with international best practices.

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Aim

- 4. Aim of the policy:
 - a. To develop a comprehensive document for NUST Research and Innovation promotion.
 - b. To achieve the goal of increasing NUST visibility with a consistent flow of information that will help in research growth, recognition of NUST research, future research / industrial collaborations and creating a social impact leading to a knowledge economy.

Digital Media Platforms and Rules

5. Research Directorate Website

- a. The website contains the introduction of Research Directorate followed by a detailed overview of objectives, publications, projects, published research paper stat, newsletters, NUST journals, impact factor and policies. Activities to be advertised using Research Directorate website include:
 - (1) Upcoming events (Research Seminars, Workshops, Conferences)
 - (2) Research / Industrial Collaborations
 - (3) Competitions
 - (4) Memorandum of Agreements
 - (5) Promotion of ORIC related activities and events
- b. Research Directorate website can be accessed using mentioned link (https://research.nust.edu.pk/).

The relevant information required by Research Dte for this section has been stated below:

Sr. No.	Checklist
i.	Relevant title
ii.	High-resolution photograph
iii.	Write-up for updating on Research Dte website

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NUST Research Blog

- 6. NUST Research and Innovation Blog site is a platform where related interactive content is uploaded and linked with quarterly newsletter. To maintain a steady flow of information, it is apprised that minimum **one blog per month** are to be provided by each school / college on regular basis. The content may include but is not limited to: (i). Applied research projects, (ii). Research blogs (research articles converted into blogs in lay-man language), (iii). Faculty achievements, (iv). Patents, (v). Licensing, (vi). Tech-transfer, (vii). Lab development, (viii). Opinion pieces (technology, social sciences, health science, etc), (ix). Social contributions, and (x). Competitions. Blogs are to be provided in simple lay-man language to make it understandable for the general audience. Criteria for providing blog content by respective faculty member / author is:
 - a. Minimum 600 800 words per blog.
 - b. High resolution images relevant to the blog along with captions.
 - c. Acknowledgement & details of funding agency / collaborating institution(s) to be included in blog after conclusion.
 - d. Author details at the end of the blog along with profile picture and Google scholar profile link.
 - e. Blog to be provided according to six research themes of NUST aligned with relevant SDGs.
 - f. Link of original research paper to be provided in case of research paper blog.
 - g. In case a blog is mirroring the achievement of a faculty member like an award or recognition on an international or national platform, the proof (web link) of the same must be provided.
- 7. Research blogs are generally considered blueprint of a topic being discussed or research being carried out. A well-defined blog can attract the audience and may convert into valuable outcomes in terms of readership and collaboration. Every blog received at Research Directorate is evaluated to ensure that the topic includes relevant information as per following guidelines:
 - a. Background of the topic or study.
 - b. Objective for conducting a specific research / project.
 - c. Research gap in current study.
 - d. Novelty of the research / project conducted.
 - e. NUST contribution to the research / project. Name of Principal Investigator (PI) and team members may also be included.

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- f. Explanation of how the research or project will benefit the country and overcome research gap.
- g. Plots, interactive pictures, and videos of the project.
- h. Research findings, adaptability, and outcomes.
- i. Possible area (s) for collaboration (if applicable) and conclusion.
- j. Name of funding agency.
- k. Acknowledgement (if applicable).
- 8. Research blog site can be accessed using mentioned web link (https://researchblog.nust.edu.pk/).
 - * The relevant information required by Research Dte for this section has been stated below:

Sr. No.	Checklist
i.	Attractive title
ii.	SDG tagging
iii.	Cover photo
iv.	Blog length 600 – 800 words
v.	High-resolution images / figures / graphs
vi.	Captions of images / figures / graphs
vii.	Collaborating institution / organization
viii.	Author Details
ix.	Author profile picture
x.	Google Scholar profile link of author

Research and Innovation Newsletter

- 9. NUST Research & Innovation (R&I) news are disseminated via various mediums including a quarterly newsletter with growing circulation exceeding 50,000 to National and International Peers. Audience are national and international researchers, academic peers, funding agencies, SDG stakeholders, government offices, NUST faculty and students (local and foreign), industry partners, NUST alumni and top international QS ranked universities. Blogs uploaded on Research Blog site are linked to the newsletter after prior approval from Competent Authority.
- 10. The newsletter is divided into six following sections:

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- a. Rankings / Institutional Achievements
- b. Research at a Glance
- c. Innovation that Commercialises
- d. Sustainability at NUST
- e. Blogs / Opinion pieces / Labs
- f. Research Seminars / Workshops / Conferences
- 11. Newsletter content is to be provided by respective schools / colleges in the form of a blog. Blog content required for newsletter is no different from the guidelines as prescribed in research blog section. Blogs provided will then be converted into newsletter format by Research Dte team and linked to research blog site that will re-direct the audience to original blog content. Any content that falls under the above-mentioned category could be included in the newsletter if it fulfills the blog content guidelines.
- 12. It is mandatory for each school / college to provide one blog specifically for a laboratory developed (new or existing) for featuring in newsletter. Blog featuring respective laboratory must include complete details from idea to inception, analysis, uniqueness, laboratory equipment, type of research that will or could be carried out at the facility, how it will be beneficial for NUST researchers and students and possible collaborations or details of services that could be offered to industry and academia by the laboratory.
- 13. HoD Research from each school / college will be the focal person to ensure provision of promotional data to Research Dte for each quarter.
- 14. To make the flow of information more fluent, a Google Form will be created by Research Dte and will be circulated among all students of NUST. The form will be filled by students with the required information of project being conducted and completed at each school.
- 15. Research Dte will then evaluate each project received and contact the supervisor for provision of blog on that project. Supervisors can then instruct the students to draft a blog duly vetted accordingly.
- 16. A dedicated email address for newsletter curator will be created for newsletter related communication and feedback.
- 17. Every quarter, the best content provided for promotion in newsletter will be counted for quarterly Best Newsletter Blog certificate of appreciation. However, a prize money of PKR 10,000 and a certificate of appreciation will be awarded for Best Newsletter Blog of the year based on evaluation of complete year as under:
 - a. Blogs which are provided under the umbrella of research, innovation, and opinion pieces will only be considered for further shortlisting of **Best Newsletter Blog**.

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- b. Criteria of shortlisting for "Best Newsletter Blog" will be (i). Quality of the blog (Appendix I), (ii). One year viewership count consolidation of all published quarterly newsletters.
- 18. Newsletters archives can be accessed using mentioned web link (https://research.nust.edu.pk/newsletters/).
 - * The relevant information required by Research Dte for this section has been stated in the "NUST Research Blog" section.

Research and Innovation Social Media

- 19. Research Directorate is using a mix of social media platforms, i.e., Twitter and Facebook for promotion of research and innovation activities on a daily basis. Platforms are selected based on its impact on the digital sphere, availability of research community, government offices, funding agencies and influencers on the platform. Purpose of this activity is to disseminate the news of research and innovation activities happening at NUST to a wider audience for overall research visibility.
- 20. Minimum two posts per day will be published on R&I social media. Post content will mainly be comprised of research papers, research blogs, research projects, research grants, seminars, conferences, patents, licensing, newsletter launches, call for research collaborations, memorandum of agreements (MoAs), and industrial linkages. Call for Papers, Research Project Funding and NUST Journal Publications will also be carried out on these platforms.
- 21. Anything that is promoted from R&I official social media platforms will be linked to either Research Dte website, research blog site, research article website or newsletter to increase online traffic inflow.
- 22. A strategy of using relevant hashtags and accounts tagging will be used for each post relevant to the targeted audience. Tagging includes foreign and local embassies, collaborating institutions, funding agencies, ministries, influencers, research centers, publishers, indexing agencies, UN and SDG agencies.
- 23. Research Directorate being the custodian of research and innovation activities, reserves the right to evaluate the content received for promotion and publish based on its impact and novelty.
- 24. Anything that is related to the promotion of research, innovation and commercialization will be send to Research Dte.
- 25. Research and Innovation social media platform links are mentioned below:
 - a. Twitter (https://twitter.com/Research_NUST)
 - b. Facebook (https://www.facebook.com/NUSTResearch)

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- 26. **Events promotion:** Any event comprised of seminars, workshops, conferences, etc which are being organized under the umbrella of NUST, will be eligible for promotion from NUST Research and Innovation digital platforms. However, events which are being organized by any institution outside NUST or attended by NUST faculty member(s) will not be entertained for promotion from NUST Research and Innovation digital platforms.
- 27. The relevant information required by Research Dte for this section has been stated below:

Sr. No.	Checklist
i.	Event title
ii.	Date and Venue
iii.	Promotional banner for digital media
iv.	Event details (write-up)
v.	Organizing / collaborating institutions' names (for tagging on social media)
vi.	High-resolution images

- 28. **Research paper promotion:** To increase the number of quality promotional tweets for research papers, respective faculty members from each school / college are required to share latest or impact factor research papers with Manager (Publications Promotion) along with two to three liner content summarizing the crux or novelty of stated research. Resource person will then modify and convert the same into social media post as per practice keeping in view social media guidelines.
- 29. Research paper provided by faculty member for promotion on social media, will be promoted by crediting respective author from NUST, if they are corresponding author or residing in first four positions. If corresponding author is a student, the paper will then be credited to the respective supervisor.
- 30. In case the corresponding author is not from NUST then the senior most author from NUST residing in the first four positions of paper will be credited in social media post promotion.
- 31. If the corresponding author is not from NUST, nor in first four positions, then the name of contributing author will be mentioned.
- 32. The relevant information required by Research Dte for this section has been stated below:

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Sr. No.	Checklist
a.	Research paper title
b.	Paper DOI / web link
c.	Two to three liner summary of research work in simple layman language
d.	Relevant hashtags
e.	Names of relevant funding agencies or organizations for tagging on social media

- 33. **Research grant / project promotion:** In case a researcher from NUST wins a research grant / project, respective researcher must provide research grant / project details consisting of one to two paragraphs along with relevant image to Research Dte.
 - a. Research project / grant awarded to principal investigator (PI) from NUST, will only be considered and credited in the social media promotion.
 - b. If the PI and Co-PI are from NUST, then the name of both will be included in the promotion.
 - c. Moreover, a blog of same research project / grant may also be provided for featuring on Research blog site and subsequent inclusion in newsletter for possible collaboration in the field.
- 34. The relevant information required by Research Dte for this section has been stated below:

Sr. No.	Checklist
a.	Project title
b.	Funding agency
c.	SDG tagging
d.	One image or graphical representation of the project awarded
e.	Two to three paragraphs on the technology to be develop
f.	Names of relevant funding agencies or organizations for tagging on social media

35. Patents / Intellectual Property / Tech-Transfer promotion: Data for promotion of patents, intellectual property and tech-transfer of IPRs will be provided by Innovation and Commercialization Office of NUST (ICON).

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36. The relevant information required by Research Dte for this section has been stated below:

Sr. No.	Checklist
i.	Title
ii.	Name of patent filing body
iii.	SDG tagging
iv.	Relevant image or video
V.	Two to three paragraphs describing the technology

- 37. **Faculty achievement promotion:** In case a researcher receives a recognition of civil award or highly cited research paper is required to provide data as per the guidelines for social media post creation.
- 38. The relevant information required by Research Dte for this section has been stated below:

Sr. No.	Checklist
a.	Title of achievement secured
b.	Relevant image
c. Two to three paragraphs on the achievement media post creation	
d.	Proof / web link where the news was announced

- 39. <u>PlumX Metrics:</u> Research Dte will be using PlumX metrics, a byproduct of Scopus, to provide insights on how audience interacts with individual research paper in online environment. This will also provide statistics on number of citations, abstract and research paper reads, downloads, mentions and social media activities (e.g. tweets, likes, shares), etc.
- 40. <u>Mendeley:</u> Research Dte will add research article onto Mendeley Database, which are provided by the faculty. In future, Mendeley database will be integrated with NUST Research Portal database for automatic retrieval of research articles.

41. Research and Innovation YouTube Channel

- a. Research Dte will be launching its own YouTube channel, where videos for research projects will be uploaded. Channel will be handled by Research Dte.
- b. Videos of each project of NUST will be developed featuring core functionality, uniqueness, development process, adaptability, and use of final product. Video duration will be 1 to 2-minute. Respective schools / colleges will provide a list of all developed projects.

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- c. Video uploaded on YouTube channel will also be promoted through website, social media, and newsletter to provide maximum exposure to the developed technology nationally and internationally and to showcase institutional strength that will indirectly contribute towards collaborations and tech transfers.
- d. S3H Mass Communication Department will be utilized for video production & editing facility.
- e. YouTube Channel using mentioned link can be accessed (https://www.youtube.com/channel/UCQ-leQmhW 8M ku06cM1VWQ).
- The relevant information required by Research Dte for this section has been stated 42. below:

Sr. No.	Checklist
a.	List of completed project
b.	Details of developed project stating the development, core functions, uniqueness, adaptability, and use of final product

Financial Effects

43. The annual maximum financial effect of the policy is:

Sr. No	Budget Head	PKR million
a.	Mail Chimp (Newsletter) and Paid Software	0.1
b.	Paid Digital Campaigns	0.05
c.	Videos (Development & Editing) / Financial Incentive	0.2
d.	Newsletter Printing / Circulation	0.05
Total Budget		0.4

Comments of Research Directorate

The proposal was deliberated and endorsed by 9th UCRIP held on 30 Dec 2022.

Recommendation of Research Directorate

45. Proposed NUST Research and Innovation Digital Media Policy is recommended for approval with immediate effect.

Approval from ACM

The working paper was recommended and duly approved by 64th ACM held on 46. 23 January 2023.

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Appendix I

Sr. No.	Criteria	Tick if eligible
1.	Appealing / attention grabbing title	
2.	Blog length (700 minimum)	
3.	Topic Background	
4.	Appealing / Eye catching opening to grab the attention of audience	
5.	Written in layman (simple) language	
6.	Easy to read through (use of heading, sub-heading, bullet points)	
7.	Paragraph length must be short	
8.	Call to action (areas of collaboration)	
9.	Use of relevant images to make the blog visually engaging	
10.	Blog feature image (cover photo)	
11.	Keywords relevant to the topic	
12.	Originality of research objective and what the idea is presented	
13.	Creativity of study and uniqueness	

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