
Role and Significance of Info graphics in Handbook Manuals for Performance Accountability in Planning Departments

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Abstract: Handbooks and manuals are noteworthy tools for the guidance of the functioning of any product or process. Human beings to function optimally have varied needs. The physiological needs which are required to be fulfilled are hunger, thirst and sleep while the psychological needs are autonomy, competence and relatedness. The paper puts forth that the important prerequisite of the content of any handbook manual is to satisfy the psychological necessities. The paper attempts to review different formats of operational manuals to study and understand their effectiveness. The paper concludes that graphics contribute strongly and are appropriate apparatuses to convey information.

Key words: Graphics, Information, Manual

Introduction:

It is seen that any operations manual has the capacity to improve the understanding and performance of the stakeholders. Most manuals and handbooks are designed for troubleshooting. The manual's contents are aimed for standardization of processes and procedures. Most manuals assume the readers understand the system. Also studies suggest that human brains can process a definite amount of information at a given time. The main purpose of manuals is to standardize the training techniques and evaluation processes. Manuals prevent delays and errors. Manuals and handbooks help to increase reliability on the product or processes they explain. The age old established formats of the manuals need to be reviewed for their effectiveness to convey

information. Digestible formats need to be created to match psychology of the persons who are using the manual. Pages of the manuals need to be designed with minimal text and informative illustrations to facilitate communications.

Literature review:

Varied forms of relevant literature was reviewed including research papers and actual handbooks and operation manuals. The literature reviewed showed that several diverse aspects of handbook are discussed and addressed. Aspects of content length, depth of information, page layout, font type, size and weight of the handbook manual are discussed, debated and researched at length on various scales and scope. The aspects and their relevant issues were found to be common across geographical borders.

Identification of issue:

A significant omission is seen from the aspects addressed in various literature. It is seen that the aspect of the requirement of info graphics in manuals needs to be researched on. There is a noteworthy research gap on the aspect of how information is best conveyed through illustrative graphics. Communication to convey information through visual expressions would be a critical inclusion in manual design.

Methodology:

A sample size of more than 15 publications were studied. The target sample publications were considered so as to cover diverse typologies of handbooks and manuals.

A comparative methodology was used to review the target sample publication for the weightage of info graphics in each. Each handbook manual was critically reviewed for the application of informative graphics to communicate information in the contents.

Table: Comparative study of various publications

S.No	Publishing	Authors	Remarks
1	Paper: The Operations Manual: A Mechanism for Improving the Research Process	Ann Bowman Jennifer Peters Jean Wyman	Infographics as an aspect of an operations manual is not discussed at all
2	Paper: Design of manual material handling system through computer aided ergonomics: A case study at BDTSC textile firm	Amare Matebu Birhanu Dagneu	Infographics is not considered
3	Paper: User's Manual as a Requirements Specification: Case	D.M. Berry, K. Daudjee, I.	Use of infographics is not considered as

	Studies	Fainchtein, J. Dong, M.A. Nelson, T. Nelson, and L. Ou	a requirement of a manual
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S.No	Publishing	Authors	Remarks
4	Communication Toolkit- VisualDesign.	2000 Michigan State University Board of Trustees	75% content is visual graphics
5	Field Supervisor Manual: Global Adult Tobacco Survey (GATS)	Global Adult Tobacco Survey Collaborative Group. Global Adult Tobacco Survey (GATS): Field Supervisor Manual, Version 2.0. Atlanta, GA: Centers for Disease Control and Prevention, 2010	6% content is graphically represented
6	Planning Manual	Yoe C., Orth K., IWR Report 96- R-21, November 1996	No infographics were used
7	Manual For Cbr Planners	Ed. Thomas M., &Thomas M.J., Asia Pacific Disability Rehabilitation Journal	No infographics were used
8	Planning Handbook	World Health Organization 2015	35% graphically represented information
9	Fieldwork Manual	Consolidated procedures relating to fieldwork at Curtin University	21% graphically represented information
10	Fieldwork Manual	DEPARTMENT Occupational Therapy, UCA Department of Occupational Therapy	15% graphical representation of information
11	Fieldwork Planning Handbook	Eds. Morten Rasch et al. International Network for Terrestrial Research and Monitoring in the Arctic,	5% graphical representation of information.
12	Manual For Planning, Developing And Monitoring Strategic Documents And Their Action Plans	Strategic Planning Office, Republic of Kosovo	27% graphical representation of information.
13	Student Fieldwork Manual	Messiah University	6% graphical representation of

			information
14	Professional Practice Manual	Witty D., Canadian Institute of Planners	15% graphical representation of information
15	SUPPLIER QUALITY ASSURANCE MANUAL	VOLVO group	53% graphical representation of information

Discussion/ Findings/Analysis:

A comparative approach as a methodical tool was used to examine the extent of the application of graphics to convey information. The comparative study was useful to study if there are characteristic patterns to the page layout and the extent of usage of informative graphics pertaining to a typology. The comparative study helped identify similarities and differences in the various manuals studied.

Various types of manuals in the sample size had differing content size. A large percentage manuals studied followed the descriptive and narrative approach of manual design. A few displayed multi language formats as well. It was seen that almost all had negligible percentage of illustrative graphics. Detailed descriptive text was the key tool adapted by all manuals to convey information regardless of the number of pages taken up and the resultant increase of thickness and the weight of the manual.

With the onset of digital media and advanced software, present day information exchange is unthinkable without graphic design. No field of interaction is left untouched by digital media. Prompt and fast information exchange is the base of any digital platform. Information graphics play a large significant role in the appropriate and quick exchange of correct information. It uses less space to convey information strongly and clearly.

The study covered varied typology of manuals and handbooks encompassing sets of different stakeholders and users. The manuals studied showed that marginal percentage of manuals give emphasis on graphical representation of information. The manuals which had a higher percentage of graphics were better perceived for understanding by their stakeholders and users. The readers of the manuals with larger percentage of graphically represented information were able to grasp and convey the key concepts of the information on the page in lesser time than the readers of the manuals with lesser percentage of graphically represented information.

Conclusion:

Graphically represented information has the potential to convey the information of any manual in quicker and precise manner to the users, readers and stakeholders.

Recommendations and Future research opportunity:

The usefulness of the graphically represented information to convey the information appropriately to the users, readers and stakeholders leads to a massive research opportunity and stronger prospects of software development in the future. Use of Braille and large fonts are also the suggested inclusions in the formats of manual design in the future.

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