

A DESCRIPTION OF MCC ON-LINE
COMPETITION SOFTWARE

AND

A REVIEW OF THE FIRST ON-LINE COMPETITION

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1.0 INTRODUCTION

1.1 Objectives

The objectives of this report are:

- (1) to describe our current on-line competition system (termed “System 1”) and how it evolved;
- (2) to assess the performance of System 1 in the first Mississauga Camera Club (MCC) digital image competition of 2014-2015 and
- (3) to propose and invite recommendations for the further development of System 1.

1.2 Evolution of On-Line MCC Digital Competitions

The transition from the traditional competition format to the on-line system has taken place over a tumultuous 16 month period in the MCC digital competitions. In the traditional format, judges attend a session where they score and comment on projected digital images. The on-line system utilizes the Internet to allow the judges to remain at home and judge the images on their own computers.

The following are mileposts that provide a perspective:

August 22, 2013: publication of a report on the MCC competitions (“The Digital Image and Print Competitions of the Mississauga Camera Club” by Steve Balke). The report included results of a membership survey. Its main conclusion was that the members enter competitions to be educated and many were not particularly happy with the quality of the judges’ comments. It recommended an Internet based “MCC Image Forum” where members could obtain feedback on their images. The idea of on-line judging for our competitions is mentioned as being done by some other clubs and having the potential advantage of providing superior judging. However, members had expressed concern regarding the need for calibrated monitors.

September to December, 2013: The amount of volunteer time associated with running the digital competition nearly caused cancellation of the Digital Image Competition. Omar Sheikh came to the rescue and agreed to run the competitions to the end of the club year.

November 2013 – March 2014: Extensive e-mail discussions about establishing an on-line competition system took place. Steve, as Director, Competitions, began searching for a commercially available on-line competition system. The main motivation was to reduce the volunteer time required for the competitions. However, many other advantages were also evident. Robbie Robinson kept up the momentum in January during Steve’s absence. Many members contributed to the discussion. Marcus discovered that Picturk offered the best commercially available alternative. Steve negotiated with Picturk until they finally agreed to modify their

website at cost for the MCC to be able to export data for the MCC historical database. Previous to agreeing to that option, Steve convened a meeting of interested members for March 15, 2014.

March 15, 2014: Picturk Evaluation Meeting. At this meeting, attendees attempted to submit images to the Picturk website and evaluate the judging function. Several members had problems with even the input of images. Omar made a presentation of his the automated spreadsheet and DOS-command system (the "Spreadsheet System"), which he had developed and used for competitions. The Spreadsheet System was used to classify image submissions into correct folders and to generate files needed for ProShow, for the Club website and for the database. Some error checking of submissions could be done with the Spreadsheet System but mostly errors in submissions were identified and corrected by human intervention. Error rates in about 50% of submissions were typical and time consuming to rectify. Hilarie McNeil-Smith and Omar strongly encouraged the use of a system employing DropBox. The conclusions of the meeting were: (1) Picturk would not be adopted; (2) Tess Francis, Omar Sheikh and John Sutherland would form a team, led by Tess, to develop an MCC on-line system.

March 20, 2014: The Image Appreciation Special Interest Group (IA SIG) was created by Tess Francis. This SIG provides members with the opportunity to discuss each other's images.

June 24, 2014: At the first meeting with Tess Francis as Team Leader for the Digital Competitions an updated system was planned. It would utilize a webpage for input (designed by John Sutherland) to generate error free submitted files which could be fed into the existing Spreadsheet System, which would be used to generate the appropriate folders in Dropbox off-line storage. A new Excel workbook (Judging Workbook) would be developed by Tess Francis, with links to to the Dropbox files by the judges and place for the judges to record their results.

August 2, 2014: In early August, Tess reported that no progress had yet been made on the on-line system for reasons beyond her control and suggested that we may need to delay implementation of an on-line system. The Board of Directors advised that we return to attempting to use Picturk. However, Picturk failed to respond to repeated e-mails. Omar met with Tess in mid-August and provided an overview of the Spreadsheet System. Tess was then able to develop the Judging Workbook, which dovetails into the Spreadsheet System. John Sutherland was unable to deliver the webpage so it was decided to have the members e-mail their submissions as usual, with forwarding to Dropbox using the SendToDropbox service.

September 11-14, 2014: Testing of the Judging Workbook by selected MCC members (Jim Calvert, Hilarie McNeil-Smith, Bruce Kennedy) and implementation of various recommendations.

October 16, 2014: Images submitted for the First Competition. System 1, incorporating the Spreadsheet System and Judging Workbook, was ready for use.

October 25, 2014: The CAPA Judging Course proposed by Robbie Robinson and very well implemented by Craig Stirton was a rousing success. Robbie proposed that we enlist course graduates to review the images of Beginners in the next competition. Tess proposed that the graduates be “shadow judges” (i.e. judges whose scores are not recorded) for the whole competition. Steve decided not to implement either idea at this time in order to focus our limited resources on successfully running the on-line competition in a “normal” mode.

2.0 DESCRIPTION OF SYSTEM 1

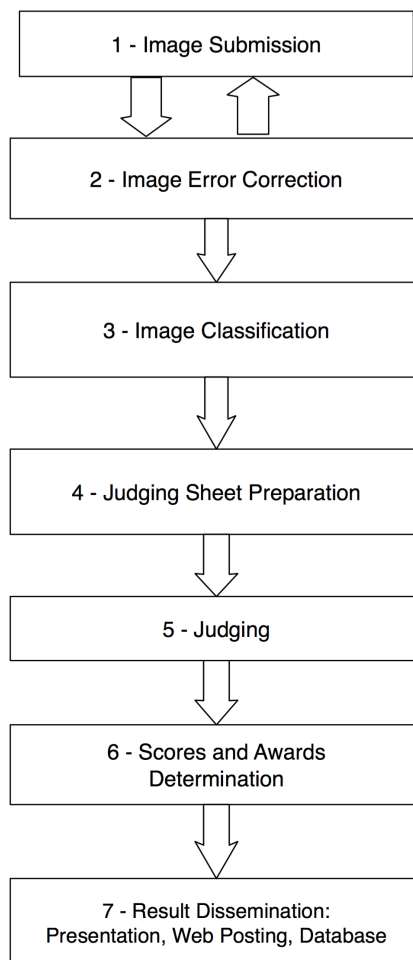


Figure 1: Overview of System 1

As shown in Figure 1, the first action in System 1 is “Image Submission” by an MCC member who wishes to enter the competition. The file is named and e-mailed in the same manner as in previous years. The only difference is that the image size has maximum horizontal and vertical dimensions of 1920 x 1080 pixels as opposed to 1400 x 1050 pixels. The larger size is permitted because now the full screen size of current monitors can be used. Emails containing submissions are forwarded automatically to Dropbox using the SendToDropbox service.

Often members make errors in their submission. Since files must be completely error free, all errors must be detected and returned to the member for correction (or corrected by the Team Leader). Currently this is a very time consuming step, done manually with some flagging of errors within the Spreadsheet System.

Once the files are error-free they are sorted into folders using the Spreadsheet System. Each folder corresponds to a different competition (e.g. Beginner-Creative, Beginner-Pictorial, Advanced-Pictorial, etc.).

Action 4, Judging Workbook Preparation, refers to the preparation of the Judging Workbooks to be used by the judges. The Judging Workbook allows each judge to view the images stored on Dropbox and record both scores, ranks and comments. The Team Leader e-mails a separate copy of the Judging Workbook to each judge.

Action 5, Judging, is done by each of three judges in three separate copies of the Judging Workbook. Each judge e-mails the completed Judging Workbook to the Team Leader.

Action 6, “Scores and Awards Determination”, is done using automation in the Judging Workbook to combine the three completed judges’ copies of the Judging Workbook into one, the Master Judging Workbook, which calculates the total scores and assigns points based on the judges’ ranks. The Team Leader manually enters the award (1st, 2nd, etc.) by inspecting both rank points and total scores. The Master Judging Workbook also contains information used in the presentation on Results Night.

Action 7, “Result Dissemination: Presentation, Web Posting, Database”, is the transfer of information from the Master Judging Workbook to the Spreadsheet System, which produces data needed to rename winning images in the folders, to provide images for posting on the Club web site and to provide records for the Club historical database.

3.0 REVIEW OF THE FIRST MCC ON-LINE DIGITAL IMAGE COMPETITION AND RECOMMENDATIONS

3.1 Image Submission and Image Error Correction

For this competition, images were to be submitted before midnight, October 16, 2014. Sixty-five members entered images with fifteen of them (23%) submitting their images in the last two hours before the deadline. In total, 45 members (almost 70%) submitted images within the final two days of the competition. A total of 192 images were submitted with each competitor submitting an average of three images (a maximum of three images per competitor was permitted).

Over 25 entrants (about 40%) submitted images that contained errors. Errors in filenames were most common and occurred in 19 images (75% of errors) Filenames were corrected by the Team Leader, with notification to the entrant. The remaining errors related to images that exceeded the maximum resolution – these images were returned to the competitor for correction but were not disqualified if replacement images were not submitted.

Recommendation:

Website input instead of e-mailing the files to the Team Leader could oblige competitors to submit error-free files. Correcting errors is now the most time consuming step for the Team Leader in running the competition. So, development of such a website deserves high priority. Until such a webpage can be developed, additional volunteers should be recruited to verify images as they are submitted.

To minimize the work needed for corrections by volunteers, in the future corrections will not be made by the Team Leader or other volunteers. Entrants will be notified within 48 hours of any submissions containing errors (including issues with filenames or resolution) and will be invited to submit replacements. Entrants will be allowed to replace images with errors by the regular submission deadline. Images that contain errors will be disqualified.

3.2 Image Sorting

Once error-free files are obtained, the Spreadsheet System will generate the needed folders corresponding to each category and expertise level and sort images into the folders very quickly. However, it does require some skill to run the Spreadsheet System, which depends on DOS commands and may not be suitable for non-Windows operating systems.

3.3 Judging Sheet Preparation

Although preparation of the Judging Workbook is now highly automated and accurate, there remains some time consuming manual areas. Thumbnail images must be produced with a third-party program (such as Lightroom) and manually imported into the Judging Workbook using the Excel Image Assistant add-in.

Also, the VBA code, which is used for macro automation, is currently without comments. If a bug is found it may be very difficult to resolve and further development of the software could be very difficult for a new Team Leader.

Recommendations:

Detailed documenting of the existing program on both the use and understanding levels should be implemented. Creation of “Handbook for On-line Digital Image Competitions of the Mississauga Camera Club” containing this information has begun.

3.4 Judging

For this competition, judges were requested to conduct their judging between October 19 and November 1 inclusive. All three judges (along with a fourth “trainee judge”) cooperated and supplied their completed copies of the Judging Workbook within that time period.

They all readily operated the Judging Workbook. Their only major complaint was the time required to comply with the request to comment on about 40% of the submitted images.

Recommendations:

Workload for the judges must be reduced. The simplest way of accomplishing this is to arrange for only one judge to comment on a specified image. This will divide the workload by a factor of three. A new version of System 1, System 1.1 has already been developed to implement this alternative for the Second Competition.

Adoption of Robbie's idea to allow CAPA graduates to judge the image of beginners would reduce the workload on our three external judges but would increase the work for managing the competition and would require updates to the Judging Workbook.

In the longer term, judges could be advised of the ability to use voice- to-text options to facilitate insertion of comments.

Subdividing the task amongst more judges is yet another possibility although, as with the use of CAPA graduates for judging beginner images, this would increase the work for managing the competition and would require updates to the Judging Workbook .

Once more comments are obtained there remains the challenge of communicating the comments to the members involved. Since members value education from competitions this objective is very worthwhile. On Results Night, time permits only a few comments to be communicated. Preparation of a file that would permit automated e-mailing of scores and comments to competitors is a recommendation for the longer term.

3.5 Scores and Awards Determination

Scores follow the current conventions: they range from one to ten. The program easily allows the Team Leader to require comments if a score below or above specified limits are assigned by a judge.

In addition to scores, each judge assigns a rank of from one to five for what the judge considers the five top images.

Awards are determined as follows:

- i. Identify images with the highest score.
- ii. If two or more images have equal highest scores then examine their total rank value.

The total rank value (TRV) is calculated as follows:

$TRV = \text{number of times ranked 1} \times 15 + \text{number of times ranked 2}^{\text{nd}} \times 10 + \text{number of times ranked 3}^{\text{rd}} \times 6 + \text{number of times ranked 4}^{\text{th}} \times 3 + \text{number of times ranked 5}^{\text{th}} \times 1 + \text{number of times not ranked} \times 0$

The total number of times an image can be ranked is the three (i.e.: the number of judges). The weighting factors (15, 10, 6, 3, 1, 0) were determined empirically by seeing whether the results appeared reasonable and especially whether ties were avoided.

- iii. The image with the highest TRV and the highest score is awarded 1st place. The image whose score is tied with this image and the second

highest TRV is awarded a 2nd place. If there is a third image with the same score then it would be awarded 3rd place for having the third highest TRV.

- iv. Once the images with the highest scores have been exhausted consideration of awards passes to the second highest score and again the TRVs are considered if there is more than one image with the second highest score.

Recommendations:

Every effort needs to be made to have the judges score be the only determinant of awards. That means minimizing the occurrence of tied total scores. Allowing judges to provide fractional scores (or, equivalently, scores ranging from 0 to 100) is one method of accomplishing this.

The assigning of ranks by the judges should be retained: no matter what score method is used it is always possible that tied total scores will occur. Selection of factors in the calculation of TRV should be further explored. Whatever factors are used, it is important that the values selected be set previous to the competition and not changed until the next competition to avoid any appearance of bias.

It may be possible to supply judges with the completed worksheet showing all scores and ranks after the competition and allow them to decide upon awards by speaking together. There are obvious difficulties in accomplishing this because of time and workload constraints. Also, calculation of awards from scores has the advantage of not allowing one judge to dominate others in the decision making.

3.6 Results Dissemination

The Spreadsheet System is used to rename winning images and to produce files for the uploading of winning images to the MCC website and for uploading data to the MCC database.

For Results Night, no Proshow file was prepared. Instead, the images were shown from a computer and Tess provided live audio voiceover of image information to the audience. The Master Judging Workbook provides information that is useful for this purpose.

CONCLUSIONS

System 1 enabled our First On-line Competition to be held smoothly and on schedule. There were no issues with the change to on-line judging for our members because the only change required of them was to the maximum dimensions of the image that they submitted. System 1 incorporated the use of the Spreadsheet System, technology that has been used in recent years in MCC competitions. The

main modification was to forward submission emails to Dropbox using the SendToDropbox service. The new Judging Workbook is very user friendly for the judges and no operational problems resulted. Combining the judges' scores and comments is automated and a method for determining awards based upon total score and, for ties, total rank value. The Judging Workbook provides information that is transferred to the Spreadsheet System so results can be disseminated. Use of an active voiceover instead of a ProShow file offers about a ten hour saving in preparation time as well as more flexibility.

The use of System 1 offers a very large saving in effort and time. Instead of a team of six to host the judges and a dedicated meeting room, the competition was run only by Tess with some assistance from Omar. If it were not for the need to correct errors in the submissions, about four person-hours work in total would have been required. As mentioned above, development of a website to stop erroneous submissions deserves very high priority.

A second high priority recommendation is reducing the workload for the judges. As mentioned above, the latest modifications to System 1 will reduce their workload one third by having only one judge comment on a specified image.

The traditional primary concern with a home-made system such as this is that it will only be able to be run by the creator of the system. To avoid this issue, a handbook for future team leaders that will contain a detailed description of both the use and coding of the system is in preparation. Video files also will assist in communicating details and have already been used to instruct judges on how to use the system.

The old concern of judges not using calibrated monitors is still present. At this point they are advised of the need and it's left to their competence to select an appropriate monitor. This did not appear to be an issue in the First Competition.