

CMS NewsLine

December 2004

Interpreting Technology and New Media

A Heads-up for Media Executives What Gives with Digital Production?

By Stuart W. Volkow and Leo B. Willner, Ph.D.
CMS Derfler Associates

Let's face it, if content is to remain king and it needs to for everybody's sake, more should be done to improve the economics of the advanced media for the benefit of content creators, networks, ad agencies and service providers. If not, the quality of the content and the advertising will decline while profits may also plummet.

Thus the old ways of creating and producing TV and other media content including its short forms and advertising needs further evolution or there could be the devil to pay. The reason for

this is that as media fractionates into hundreds of channels and multiple platforms a most critical situation naturally arises. Where is the money to come from to maintain the current high level of quantity and quality so as to sustain and even grow the audience? All the while the somewhat brain dead method of willy nilly repurposing ads into venues and genres they don't fit may no

"Where is the money to come from to maintain the current high level of quantity and quality so as to sustain and even grow the audience?"

Don't Miss the Last Word

CMS NewsLine offers items of interest for everyone.

Kalsow's Back-Channel offers candid comments from the publisher.

Each month you will enjoy commentary on the state of the industry, new media and technology.

CMS NewsLine accepts no advertising, so expect our point of view to be no-nonsense, and maybe even a little controversial.

longer satisfy many of the advertisers — or even some networks. Thus at a time when more funds are needed, the advertising revenue stream itself is in jeopardy. In this regard it is

important to recall that TV advertising represents about half of all the revenues of the networks and service providers. Herein we start from the premise that if technology is part of the problem, it must also become part of the solution.

Herein we address the main questions that relate to today's digital media production system and discuss

CMS NewsLine

"Validating the Middle Ground"



CMS NewsLine
CMS Derfler Associates
Lake Forest, CA 92630
Tel: +1.949.584.0989
www.cmsderfler.com
newsline@cmsderfler.com

December 2004

many of the relevant processes and technologies. Together these form the challenge which digital production faces. They also represent the evolving methodology that is moving us inexorably toward a better media production system. The production of digital media is discussed as a system in transition — including the bits and pieces that make it work. In this rapidly changing arena, all who produce new media have to be aware and well armed in preparation for more change! So do read on and stay tuned.

Throughout its depth and breath the nature of media production along with its formats and its complex finances is undergoing radical change for these and other reasons. It would be foolhardy and bad business for anyone in the media to ignore the revolution occurring on the production side in response to the many changes taking place in the media enterprise as a whole. As the equipment manufacturers, content distributors, major studios, media conglomerates and the FCC have all accepted that the all-digital media universe is here to stay, there can be no turning back. For this reason producers and programmers alike are under great pressure to adopt the new media production modes that accommodate the on-demand, time shifting and other characteristics of digital media. As always, those among us who are willing and able to embrace the new paradigm and seek ways to

“Throughout its depth and breath the nature of media production along with its formats and its complex finances is undergoing radical change...”

answer its call will have lots of opportunities to grow their business and to prosper. While those who resist the all-digital media world put themselves and their organizations at an ever-growing risk.

PRODUCTION COSTS MUST GO DOWN

As new channels for media continue to proliferate on a variety of platforms the entire advanced media scene is being transformed into an audience-in-control model. This is a most critical trend as the greater choices and new varieties of access thus enabled will lead to significant changes in the behavior of the viewers. As a consequence, new forms of programming and new varieties of advertising and e-commerce are coming to the fore to fit this model. Each requires a degree of customization to meet the needs of many an audience, program style, type of message, context and even set of advertiser preferences. Alas, as the demand for diverse programming and number of venues grows, the production budgets trend downward — as a smaller audience results in fewer production dollars — and this means budget trouble.

As is usually the case with the biggest and the best, the present handful of blockbuster television shows and other prime programming are the exception to this rule. To produce their general-purpose media for a mass audience, production cost though important is not the major driver — quality of product is. On

the other hand, for the smaller audiences of specialty shows on boutique networks (or even websites) expense needs to be cut to the bone to make it possible to produce its content and even its advertising. Indeed budgets of \$2 million or more per episode are not unusual for a CSI, West Wing and Desperate Housewives. Yet for the great many specialized shows that are being produced today, a tenth of that amount is more the norm. This applies to the many specialized cable networks like Fine Living, Do It Yourself, Food, Golf, OLN, Oxygen, Lifetime and even to the Discovery and History networks.

THE OLD WAYS WERE TOUGH

The production of media has always been a most challenging enterprise that was never for the fainthearted. To the untrained eye or mind it often appears chaotic and infuriatingly slow — a condition that can drive a media or network executive to visit the psychologist's couch. Yet, since the early days of film production, there has nonetheless evolved a more or less tried and true production methodology that inexorably moves the process along from a script to the screen. A brief review of this 'smoke-stack era' methodology may help as we attempt to contrast and compare the old ways with the style of digital media production today. Also to act as a guide to what is required in the digital production enterprise and

how this can be achieved. (Note: Skip over this part if it is common knowledge to you).

Scripting

Not much has changed over the years for the lone scriptwriter working in isolation — a solitary soul who may now have replaced his notepad for an electronic WiFi PC notebook.

"Yet, since the early days of film production, there has nonetheless evolved a more or less tried and true production methodology..."

Legend has it that David E. Kelly, an archetypical practitioner of this arcane art, still uses an old yellow pad to write. Screenwriting programs, email tools, and wireless nodes at Starbucks do help a little bit — but in

the end nothing replaces the agonizingly slow process that leads to the well-written, easy to produce, script.

Pre-Production

Pre-Pro as it is called concerns itself with all aspects of planning, budgeting, and arranging to shoot a program, an ad or a show. Indeed to avoid the fury of the producer or the director, not a frame is to be shot until the budget is locked, the schedule is made, the locations scouted, the sets made ready to go, the actors cast, and all the rest of the endless detail agreed upon by the production department heads. Most directors also use 'storyboards' to make a visual plan in advance of the 'action'. This overall planning and organizing phase typically takes longer than the shoot itself. Improvisation may be a popular term of art, but little is left to improvisation in Pre-Pro.

Production

Quiet on the set... Roll—camera... Action! ...Cut! Do another take, please, as that last one was a real mess! This is where film and electronic media actually gets used, videotape or other media recorded, and where lots of money gets spent real fast. On many a movie set \$100,000 per day or more is typical. Every shot must be 'slated' clearly and logged with reel#, scene#, take#, day and date. In the case of film, the exposed stock is usually transferred to tape for subsequent viewing and editing. When shooting on film you never really know exactly what you have captured until the processed "dailies" are projected on screen the following day. With a multi-camera studio production crew, as used in, say, the news, everything happens at once so the process relies heavily on the skills of the team to keep everything in synch. In such a case lots of money is being spent while the product being produced is for a time unseen and in doubt. Welcome to the old 20th century — wherein a real 'fox' was needed to make it all come out right. Production was controlled chaos.

Post Production

Editing in the old days was always demanding and time consuming. It was sometimes referred to as the "final rewrite" and it profoundly affected the final product. Editing a major feature or movie can still take a year or more. Good editors in film and television are highly

regarded, highly paid, and critical to the project — as much as anyone else in the production pipeline. After the picture portion is 'locked' in there is also extensive sound mixing and editing involving the dialogue, special effects, and the music. Visual effects are also built-in by specialists and composited into the film. An always a nervous and somewhat dissatisfied artistic staff keeps tweaking the sound and the images until time, energy, patience and money finally run out. Still few production heads are ever really satisfied.

"Driving this new production paradigm is the push of new technology and the pull of new requirements..."

THE DIGITAL WAY

When media production goes digital the images and attendant sound tracks are readily stored, edited, managed and manipulated with none of the deterioration or loss that remains a problem with halide emulsion film and even analog media. Once the material is captured in digital form, any so called 'bit' or part of it can be accessed instantly. The metadata needed to control it for any purpose can be attached later on. Add to this an ever-declining cost for digital storage, computing power, and digital imaging and the result is a drastically improved and permanently altered production system. The net transformation is from an old-fashioned sequential linear process using volatile media to a concurrent, non-linear and highly flexible modern workflow approach that is in a sense immortal. Voila pussycat!

Driving this new production paradigm is the push of new technology and the pull of new requirements, new modes and new formats. For example, producers must be prepared to deliver versions of their product in:

- Standard definition, 4:3 TV (NTSC for North America, and PAL for Europe).
- High definition widescreen (16:9) television.
- Widescreen and letter box versions for DVD and soon HD DVD and Blue Ray Disc (BD)
- 35MM prints for feature theatrical release.
- Digital delivery to electronic projection systems.
- Different edited versions for airlines, Cable, and over-the-air broadcast platforms.
- Foreign language versions dubbed or subtitled in up to 43 languages for worldwide release.

Add to these ‘deliverables’ the file sized box of documents that must accompany the licensing of any TV program or feature film, including legal clearances, cue sheets, and a variety of contracts that keep an industry of legal specialists in business, and the complexity grows.

To compete effectively in today’s complex market the ingenious engineers of Sony, Panasonic, and JVC have invented a variety of digital video formats that nearly fit every budget and production situation. From low end to highest quality, the choices

available today include:

- Mini-DV
- DVCAM
- DVCPRO
- DVCPRO-HD
- HDV
- XDCAM
- HDCAM

Add to this the specialized HD Cinema Camera systems from Grass Valley, the VIPER Filmstream, Panasonic’s Varicam, and Sony’s CineAlta, and you have a broad spectrum of digital acquisition tools. Although none of these products has yet matched the success of Sony’s analog Betacam SP broadcast format – with its 350,000 units sold – you can bet that the digital format is winning Cinematographers and Producers over very quickly. The selection of acquisition format also adds another layer of complexity to the

production process. Yet, its larger toolbox of image acquisition tools allows producers and editors to work in an even smarter and more cost effective way.

“Yet, its larger toolbox of image acquisition tools allows producers and editors to work in an even smarter and more cost effective way.”

These days nonlinear random access computer editing is taken for granted on such industry standard platforms as AVID, Final Cut, Sony, and Discrete Logic. In this improved production environment as the cameras capture the scene its footage can go directly to mass storage for editing. Devices used for direct-to-disc content acquisition range from small Firewire drives for portable DV cameras such as the Quickstream from

MCE technologies and the more versatile Firestore from Focus, to the Acuity multi-terabyte array from QuVIS for cinema quality HD cameras. Panasonic's P2 Camera even eliminates the need for a hard drive as it uses gigabyte sized SD memory cards. Once on disk (or memory cards), video editors can get to work and almost keep pace with the actual 'shoot'. This in turn impacts the creative process itself by providing a near to real time feedback loop that can change hearts and minds and alter the end product.

That is not all as there is much more technology at work in the production cycle. For example, replacing or supplementing hand drawn storyboards with powerful graphics tools that provide 3D animated pre-visualizations to accurately forecast the appearance of the finished product in advance is a better way. This technique is highly valued in big budget features and complex commercial shoots. Sky Captain and The World of Tomorrow was a case in point presented at the recent iHollywood Digital Studio conference in Santa Monica. Every shot for the movie was first created in detailed Computer Graphics (CG) before a single frame was shot on the set. Specialty tools such as Storyboard Artist Studio from Power Production Software speeds this motion visualization process along. Digital backlots, digital prop libraries, and digital mattes have also all become

"In the digital production world distance is no longer an obstacle... FedEx "dailies" of video or film are coming to an end."

commonplace in feature film and commercial production. These CG elements can be in production long before any actual shooting commences. In the Sky Captain project with a budget in the \$60 million range, of which talent was more than half, all of the editorial, CG creation, and final compositing of CG with picture was accomplished on standard desktop Apple computers with off-the-shelf software systems. Now that is real progress!

THE DIGITAL INTERMEDIATE – OR DI

Long before any final business or artistic decisions are made with regard to a piece of new content, a DI version is created. Here DI stands for Digital Intermediate. The DI is the post production step in which all the segments of an overall piece of content are digitized in a common standard format for storage on a large server. If the original is on film, it is scanned-in at high resolution (Sony's Spiderman was the first studio feature to be finished using DI in 4K lines of resolution as opposed to the more usual 2K). Once an image is digital, it can be tweaked and modified repeatedly as needed. Just think of a Photoshop operation carried out on a massive scale.

With a digital production system the Director of Photography can request any image adjustments he or she or the Director wants right on the set. Additional changes can also be made throughout the production process.

Kodak's Look Management System, allows a cinematographer to simulate any combination of lenses, filters and film stock right on the spot on a laptop PC. Once satisfied that an image or segment is correct, it can be e-mailed to the DI lab for matching and linking into the final output. Bingo, it is as easy as that!

In the digital production world distance is no longer an obstacle. The days of messengers and FedEx "dailies" of video or film are coming to an end. Dailies, rough cuts, color corrections, and visual effect shots can be sent via broadband VPNs such as WAMNet, Telestream, and Sony Pictures Entertainment's CineShare. The studio executive in the office, the producer on location, and the technician at the DI house can all share the same files at nearly the same time, just hours or minutes after the material was shot. This can be troublesome for a Producer or Director who needs to keep the studio executives at bay during his or her production. It also changes the goalposts for outsourcing VFX and animation offshore. The times they are indeed 'a changin'.

Sound mixing is also all-digital these days. Sound effects, verbal dialogue and music are mixed on a PC using a low-resolution copy of the movie for proper synchronization of image and sound. Sophisticated software on PCs now replaces the function of the old million-dollar analog sound post-

production facility. This is a major improvement and a large cost saving as well.

Once final color corrections are made, the finished product can be put out to distribution in the form of film, DVD, Blue Ray Disc (BD), HD TV or SD TV. This is where copy protection, digital rights management, and metadata can also be added to the digital file. The DI process ensures that the program will work in any of these formats. Thus you have an easy ability to offer the content in whatever form is needed, and you save time and money as well.

"...once the content is in digital form it can be sent downstream in a variety of file formats without any difficulty."

Technicolor Entertainment Services, a division of the French company Thomson, has used innovation to gain ground and earn the DI business of the major studios. Its strategy is to transition away from its former massive film processing business, now in decline, to a vertically and horizontally integrated and positioned digital production and distribution house. With its new capabilities, studio film vaults will soon be morphed into digital assets management repositories. Technicolor teamed up with IBM to create its Media Asset Management Service and a worldwide VPN. Therein it can store a digital "master" of any content and create almost any version of the program or video desired for easy electronic transmission and use in any part of the world. That is how a new Technicolor Entertainment company

was born.

Using a digital pipeline to re-version or repurpose a show has also become much easier. Similarly, once multiple versions of a single commercial have been readied for different formats and markets they can be stored and delivered with metadata anywhere anytime. As another example, when the deluxe special edition of a DVD comes out, all its archived footage can be available via a digital management system. Editing as well as adding in new footage is also easy. Additionally once the content is in digital form it can be sent downstream in a variety of file formats without any difficulty. And so it goes, with better, cheaper and more versatile solutions to a variety of well know media content management needs.

BROADCASTING EMPOWERED

Broadcast automation as it exists today is the DI equivalent for use with live multi-camera production. Using new generation broadcast automation systems from companies such as Parker Vision; the staffing can be reduced from as many as 10 or 11 people down to 2 or 3. Writers can start their rough editing even during the shoot by calling down raw footage from a server. Triggers for onscreen graphics and teleprompter control can be embedded into the rundown before airtime. One person can operate as many as 3 robotic cameras. Small, lightweight, high quality digital video camcorders, and

portable editing systems allow producers to work in the field more easily and at less cost, often uploading finished work for broadcast. Witness the recent election and war coverage that was quite outstanding.

CHEAPER, BETTER & FASTER

With the average network major drama or comedy budget topping \$2 million per episode, and the average studio movie at over \$60 million, the money saved in digital production is significant, even dramatic. Note that the skyrocketing cost of content is in large part due to the cost of talent

rather than equipment and systems. Indeed it is with the lower end TV show and video, those with far more limited budgets, that digital production makes its biggest contribution. In particular, digital Hi-Def equipment

now costs one-third less than traditional film-loaded cameras. Subtract the cost of film stock and processing and add the likely times savings and it adds up to a significant improvement in cost. For example, an estimated \$50,000 per episode is saved using HD instead of film on shows like Joan of Arcadia. More important still is the greater creative freedom the production team enjoys in the digital world and the benefits this provides downstream.

Most digital formats have extensive provisions for adding metadata throughout the process. Both Sony's XDCAM and Panasonic's DVCPRO

“Planning for the entire life of the project right from the beginning is the modern way to go.”

P2 formats create low resolution proxies and project files as the camera records. This allows for very fast search, and integration into a networked environment. Sony promotes its Material eXchange Format (MXF) as a standard for production metadata and networking. All the digital formats allow extensive logging and scene descriptions to be added. AVID's MetaSync product allows DRM, subtitling, captioning, and interactive triggers to be inserted into a program during the editorial process over a network. IBM's newly announced Digital Media Framework is an open, comprehensive industry initiative that incorporates XML and other technologies to integrate metadata and asset management into digital media.

Production is a total workflow problem requiring its own solution. Taking advantage of digital production today ensures that the productions are ready tomorrow, and that the staff is getting the most out of its production dollars. Ignoring the new options, complex as they may be, ensures obsolescence and that money is lost on the cutting room floor. Planning for the entire life of the project right from the beginning is the modern way to go. Working closely with programmers, distributors, and the creative folks every step of the way should lead to superior digital media production and a product that is ready for an on-demand, user-in-control better media world.

CHANGE OR PERISH

Having reached the end of this walkabout on digital production, we congratulate you for hanging in with us. The changes to the media production cycle we have reviewed contain a few of the keys to the future of advanced media. Indeed, when the economics of digital production are unfavorable the rest of the process cannot succeed. Therefore bringing digital media production to fruition is a must. It also requires that the new digital methods and systems, like those discussed herein, be carefully analyzed so that they may be adopted when ready. For the many who welcome this challenge and

"Taking advantage of digital production today ensures that the productions are ready tomorrow, and that the staff is getting the most out of its production..."

the new opportunity it represents — we hope including you — this is an important undertaking. Much more that is new is in the offing to warrant your attention and prod you into a bit of risk taking. That is if you are interested in earning an edge over the competition. All in all this is a clarion call to engage in advanced digital media production. Go for it!

(Stuart Volkow and Leo Willner contributed to this issue. In order to discuss any of these points with the authors, please e-mail them at: stuart@cmsderfler.com and leo@cmsderfler.com)

[CMS NewsLine frequently publishes the works of contributing writers. The views expressed are strictly those of the contributors. CMS NewsLine makes no endorsement of their opinions.]

Send a question or comment by e-mail: info@cmsderfler.com

KALSOW'S BACK-CHANNEL: "Validating the Middle Ground"

Dear colleague, 2004 has witnessed another time of great change and momentous events in the media, communications and computer high tech business. Consequently it seems appropriate that we insert into this end of year issue some commentary on a few of the more important technology 'happenings' of 2004. If you are of a mind, please send along your comments and recommendations. Here then is our limited list of items in somewhat random order:

■ **HOME PLUG** – The FCC's approval of broadband over powerline (BPL) enables broadband availability around the home without Ethernet cabling, and reaches far beyond the wireless access of IEEE 802.11 a/b/g/n in many households. It also gives a boost to the HomePlug standard for in-home networking allowing electronic media content to reach every room in the home by way of the standard AC electrical wiring already in place.

■ **MS WINDOWS MEDIA PLAYER 9** – Even those who love to hate Microsoft must applaud its success selling Hollywood on a more robust DRM solution and scalable video system. Apparently the gnomes of Hollywood now feel they can trust this system to securely serve-up legal content to all manners of devices from PDA and Cell Phones to high-resolution digital media centers and televisions. The method uses IP packaging and transport to enable alternate service providers to move protected video content over various VPNs and other networks, increase competition and unlock one or two of the 'walled gardens'. All in all a win for consumers.

■ **INSECURITY HOLES** – Pity the consumers and corporations who purchased their PCs more than 6-months ago without the Windows XP Service Pack 2 already in place. These folks are the ripe targets for hackers and other miscreants who continue to unleash an unfair deluge of disasters onto Windows XP systems. It is indeed a bit of a Swiss cheese O/S by now – as it has been shown to be so full of holes as to leave hapless users to patch, fix, patch again, and again without a valid solution in sight. Installing SP2 into an existing PC can also be a problem, as some existing applications (like your accounting system) may no longer work.

■ **MOZILLA DA GORRILA** – Insecurity over the Internet is also annoying lots of folks. Especially those who still fully trust the Microsoft Internet Explorer browser. This problem has led millions of Internet users to safer alternative browsers such as Mozilla Firefox and especially Opera. Others have switched to alternate platforms like the Apple McIntosh or Linux systems. This leaves the Internet Explorer at a rapidly dropping 92% share of the Internet browser market. Bill Gates is getting mad and he sure is getting tired of playing high risk Three Card Monty. Maybe he should switch over to the search business, you think? Monopoly is, after all, such a drag.

■ **THE SEARCH BIZ** – One of the most momentous announcements of this past year was Microsoft heralding in its entrance into the search business. Yahoo, Google and all the rest better beware because MS now recognizes the enormous economic potential of searching into people's private PC files – with their permission of course – you think? The Mother Ship realizing it needs a long-range scanner and tractor beam, Microsoft has entered the search engine business and sent its rivals scrambling for high ground. Case in point the recent content and services acquisitions of MusicMatch by Yahoo, also Google expanding its search capabilities to the PC desktop and the content of libraries.

■ **IP VIDEO DISTRIBUTION** – This is a monstrous threat to the 60 billion dollar cable business. If IP video movie and TV show distribution is better, cheaper and more flexible, then MPEG by Comcast, Cox, Time Warner Cable, Adelphia, Insight and all the rest of ‘all the brothers were valiant’ cable MSOs, are in mortal danger. Going beyond the downloading and streaming experiments of MovieBeam and Movielink, 2004 saw one-to-one real-time IP video distribution start-up providers such as DaveTV and Akimbo with new business models. They are offering alternative content and delivery services over IP and will soon be joined by Telco behemoths such as Verizon and SBC. This lock-step attack on cable could in time overwhelm its walled garden one-to-many MPEG video based head-end delivery system model. Lord have mercy, the Huns are at the gates of Microsoft and also of Cable.

■ **A BILLION HERE AND A BILLION THERE** – H. Ross Perot once said: “A billion here and a billion there and pretty soon you're talking real money.” Apparently SBC and Verizon heard him as they are plunking down plenty of Do-Re-Mi to fashion their own version of cable MSO's ‘triple play’ by laying fiber to the residence. In this Verizon is using a quasi-MPEG pseudo-cable architecture while SBC, as the more visionary, is employing the IP infrastructure that enables the one-to-one conversation between service provider/advertiser and individual consumers. Either way, and we prefer the SBC approach, this is a dramatic turn and a major strategic move on the part of the Telcos. Caveat cable MSOs.

■ **BREAK THEM DOWN THEN BUILD THEM UP** – At the Association of National Advertisers (ANA) annual meeting CEOs and CMOs from big household name firms such as Procter & Gamble and McDonald's took the podium to emphasize the point that we are witnessing the death of mass marketing and standard network advertising. In part they said this is due to the 7-million and growing number of DVR systems that alter the TV ad model and readily skip commercials. Yet we are told there is no need to fear, as new micro-marketing technology will soon be at hand with advanced personalization based on new metadata systems that can better target the ad message. Thank heavens!

■ **VOICE OVER IP** – For those who wished to call grandma at low cost or even for free in 2004 and for the many outsourcers who looked to provide customer support for their high-tech firms out of low wage but high education level India on a 24/7 basis, VoIP played a big role this year. In fact VoIP has already changed the landline telephone business forever. Is it a major trend with a growing future? In many ways its evolution parallels for the telephone companies what the Video over IP attack is doing to the cable fortress. The message may be that the Internet and the IP technologies it employs are in the process of overwhelming the bastions that were once the telephone companies and the cable TV business. We shall have to wait and see what 2005 brings (prepositions at the end of sentences be damned).

■ **IS IT CONVERGENCE?** – This year witnessed new attempts to force the convergence of the PDA and the Cell Phone, but with lackluster results. The runaway winner in the hand-held devices market was the camera phone as it can capture life's fleeting moments in still pictures and in some cases video too. This does indeed energize the freedom and exhilaration of living in and sharing ‘the moment’. As to convergence, the story on the Blackberry is still out, but lots of people are growing longer faster fingers and ‘just lovin it’.

That is all from CMS NewsLine and Kalsow's Back Channel in 2004. Thank you for tuning in and for turning your mind to the new technology sector and its business the ‘Validating the Middle-Ground’ CMSN way. We are grateful you are along for the ride. Merry Christmas and Happy New Year.

[Your mileage may vary. –RGK]

Send a question or
comment by e-mail:
info@cmsderfler.com

About CMS NewsLine

CMS NewsLine is published monthly by CMS Derfler Associates, a Media and Technology Services company, which specializes in assisting corporations with:

- Full Life Cycle Marketing Support
- Advertising Targeting and Audience Measurement
- Branding and Positioning
- Business Development and Strategic Alliances
- Communications, Launch and Deployment Plans

At CMS Derfler Associates, senior partners personally manage every engagement.

Contact us today at:

info@cmsderfler.com or +1.831.427.3833

CMS Derfler Associates

(Formerly Alvairi-Derfler Associates)

Better Marketing Execution

CMS Derfler Associates is a **Media and Technology Services** company situated to help your company navigate through its most challenging marketing problems. It is also there to assist you sort through and exploit the marketing opportunities your company now faces. CMS Derfler partners, each with twenty or more years of direct field experience, can help prepare broad-based, professional, time-tested alternatives for action by you and your team.

Working hand-in-glove with your in-house corporate team, CMS Derfler partners can:

- Assess New Product Opportunities
- Gauge Competitive Threats to Products and Markets
- Refine Specific Pricing Tactics
- Determine How to Reposition Products and Services
- Provide Comprehensive Analysis of Advertising Relevance
- Optimize Advertising Campaigns and Promotional Programs

Better Marketing Tools

Clients of CMS Derfler Associates enjoy the confidence gained from thorough analysis, meticulous preparation and crisp execution leading to:

- Better Targeting of Products and Messaging
- More Effective Branding
- Sharper Pricing
- Improved Sales Promotions
- Better Communications
- More Effective Advertising
- More Efficient Distribution Systems
- Crisper Command and Control

CMS Derfler partners also participate in business development activities involving new marketing relationships with third parties to help create advantageous alliances, organize licensing and joint development agreements and the like. When needed, its senior staff can help facilitate a client's outside business relationships in new markets at home or abroad.

Please contact CMS Derfler today for an informal chat, to discuss a business situation, or to get advice on a new product or a changing market.

Silicon Valley: +1.831.427.3833

So. California: +1.949.584.0989



CMS NewsLine
CMS Derfler Associates
Lake Forest, CA 92630
Tel: +1.949.584.0989
www.cmsderfler.com
newsline@cmsderfler.com

Subscribe to CMS NewsLine

CMS NewsLine is available only by subscription, and is e-mailed to our subscribers at no additional charge.

To subscribe using your credit card, please visit:

<http://www.cmsnewsline.com/>

Send a question by e-mail: info@cmsderfler.com

Every month you will enjoy thought-provoking analysis of the significant issues driving the growth of new media, technology and entertainment.

Georgia Pech, Editor
CMS NewsLine