ID Card Design 101

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About Rutgers…

- The State University of New Jersey

- Nation’s 8th oldest institution of higher education, chartered in 1766

- Has a physical presence in all 21 NJ state counties, including 3 major regional campus locations.

- 8th largest municipality in NJ, by population
Rutgers University is consistently ranked as one of the most culturally diverse campus communities within the US, with members representing all 50 states, and more than 115 other countries.
92,000 active members in our community:

- 67,000 undergraduate and graduate students
- 8,000 full and part-time faculty
- 14,000 full and part-time staff
- 3000 visiting scholars and guests
...and they all need an ID card!
ID Card Design 101:

In this presentation we will discuss basic concepts to consider when creating or modifying your ID card design.

Topics will include:

- Branding
- ID photo specifications
- Data elements, including use of centralized sources
- Different encoding technologies and schemes
- Policy development including accommodation topics
Basics
What is the purpose of an ID card?

- An ID card serves as an official document to verify the identity of the cardholder, often to facilitate or certify eligibility to utilize restricted facilities or privileges.
Common Elements of a Campus ID Card

- Photo of cardholder
- Name of cardholder, legal or preferred
- Role represented by possessing card
- Institution and/or affiliated academic or administrative unit
- Issue and/or expiration date – indicator of period of validity
- Employee or student ID number, or other unique identifier
- One or more encoded or embedded electronic identifiers, based on stakeholders’ needs
First Step: Gather Information
Identify Your Stakeholders

• Stakeholders are the units that will use the ID card to provide access to privileges, facilities and accounts at your institution

• Based on business needs, they may identify a user by specific visual information or electronic verification technologies

• Additional considerations for banking partnerships:
  – More stringent security requirements, based on regulations
  – Required logos and design elements
  – Mag stripe is encoded with ABA/ISO compliant account information

• These needs must be incorporated into your ID card design
### Major ID Card Stakeholders for Rutgers

<table>
<thead>
<tr>
<th>UNIT</th>
<th>FUNCTION</th>
<th>MAG</th>
<th>PROX</th>
<th>BARCODE</th>
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<tbody>
<tr>
<td>Public Safety</td>
<td>Access Control</td>
<td>X</td>
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<td>Dining</td>
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<td>Housing</td>
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<td>Libraries</td>
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<td>Recreation</td>
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<td>Computer Labs</td>
<td>Facility Access and Printing</td>
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<td>Attendance</td>
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<tr>
<td>Health Services</td>
<td>Student Identification Verification</td>
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<tr>
<td>Mail Services</td>
<td>Self-service Package and Mail Kiosk</td>
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We identified the encoding technology used by each stakeholder to be sure our ID card design would meet their business requirements.
Common Electronic Encoding Technologies

- **Magnetic Stripe, Mag Stripe** – A strip of magnetic tape embedded on an ID card in a pre-defined location...for purposes of data encoding to be read by a card reader... Depending on the width, magnetic stripes can contain 1, 2, or 3 tracks of data.

Definition excerpts courtesy of naccu.org Terminology Guide
Common Electronic Encoding Technologies

- **Track 1 (or I)** – Data on track 1 are usually encoded using a format initially developed by the airline industry (IATA) and can contain both alpha and numeric data… Campus card programs may use track 1 for proprietary institutional use.

- **Track 2 (or II)** – Data on track 2 are usually encoded using a format initially developed by the banking industry (ABA) and contain numeric data only…

- **Track 3 (or III)** – Track 3 is most often used for proprietary offline door access systems or, in many cases, not used for campus card systems.

Definition excerpts courtesy of naccu.org Terminology Guide
Common Electronic Encoding Technologies

- **ISO number** – A number that has a valid six-digit prefix that has been registered with the American National Standards Institute (ANSI)... Campus card numbers using this type of number are commonly sixteen digits in length...

- **Bar Code** - A series of narrow bars of varying widths combined into a group that represents unique numbers, letters, or characters... Many library circulation systems also use bar codes....

Definition excerpts courtesy of naccu.org Terminology Guide
Common Electronic Encoding Technologies

- **Proximity Card, Prox Card** – An ID card using radio frequency (RF) signals to communicate with a reader.

Definition excerpts courtesy of naccu.org Terminology Guide
Common Electronic Encoding Technologies

- **Smart Card** – …A smart card is a device that includes an embedded integrated circuit chip (ICC) that can… store large amounts of data… and interact intelligently with a smart card reader…

Definition excerpts courtesy of naccu.org Terminology Guide
Next Step: Identify Roles

• Decide how many different roles will need to be reflected in your ID card design based on stakeholder needs:
  – Students
  – Faculty
  – Staff
  – Visitors/Guests
  – Contractors
  – Vendors
Role and Status Data

• Determine the source of current role and status information for your cardholders

• Preferred method is verification through data fed from a central registration or HR system, not manual entry:
  – Legal or preferred name
  – Employee appointment information
  – Student registration information
  – Guest appointments if kept by central source
Data Flow at Rutgers

Employee Data
PeopleSoft

Student Data
Banner

Student Data
SRDB

Guest Registry

Central Data Repository
Role Data Identifiers
Oracle Data Warehouse/LDAP

ID Card Database
RUconnection

Downstream Systems
Stakeholders

ID Card Technologies
Designing Your ID Card
Designing Your ID Card

Once all of the required technical elements are identified, you can begin creating your card design.
Designing Your ID Card

Things to consider during the layout phase:

- If you are using proximity or “smart” card stock, you may wish to have your artwork preprinted by a vendor, or design your card to avoid printing over the areas that contain embedded elements affecting the flat surface of your card.

- This is especially important if you use Direct-to-Card printers.
Designing Your ID Card

• If your ID card is worn as a badge, consider orienting your card so that the mag stripe is at the bottom of the card, to facilitate swiping at an access reader.

• Carefully consider the size of the photo in your design.
  – Photos smaller than 1 inch square do not facilitate visual identification verification of the cardholder.
Designing Your ID Card

• You may need to provide space in your design for registration or immunization stickers, or other post issue elements

• You may wish to use slightly different visual designs to indicate different roles, such as faculty, staff, students, and visitors
  – Different color indicators or stripes
  – Different photo placement
  – Different card orientation

Student Card

Employee Card
Other Design Considerations

- Include emergency contact information – important phone numbers, websites and other resources

- Your design should include a disclaimer
  - Indicate that card is only valid with current employment or registration
  - Should indicate if institution allows use of preferred or non legal name
  - Have it vetted and approved by general counsel
Consider Additional Security Measures

• Request card stock from your vendor that does not have the pre-encoded proximity identifiers printed on it

• Utilize the “ghost image” or custom holographic overlay feature of your ID production system if available
  – **Ghost Image** – A smaller version of the original photo image on an ID card that is generally printed semi-translucent...
  – **Holographic Overlay** – A specially designed overlay that includes a holographic (or three-dimensional image). The overlay is adhered to the card overtop of the printing and photo image and serves as an anti-counterfeit measure, making the ID card difficult to duplicate...

Definition excerpts courtesy of naccu.org Terminology Guide
Incorporate Secure Identifiers

A secure unique identifier supports the suspension of privileges and accounts when replacing lost ID cards:

- Modify the encoded identifier each time an ID card is reissued
- Completely replace the identifier if possible
  - Mandatory for 16 digit ISO for banking identifiers
- Non-changing identifiers should have an additional revision number encoded that is changed with each reissue
- Safeguard your identifiers – non-public information
- Card identifiers should not be used as a key index field in other systems, facilitating its changeability
- Coordinate with Public Safety/access control to suspend lost or stolen ID cards in a timely manner
Avoid catastrophes!

- Certain technologies and features require the proper software and printer/encoding hardware
  - Be sure that your system is capable of producing your final card format

- The technology you decide to employ in your card design must be compatible with the hardware and software systems of the stakeholders that will use it

- Be sure that the access reader technology deployed at your institution is compatible with the encoding technologies you select for your ID card

- Work with your vendor to confirm compatibility and long-term product availability to avoid costly mistakes!
Branding

Your card should be representative of your institutional “brand”:

- Study the design language used on your institution’s website
- Look for elements – logos, spirit symbols, etc. – that will help convey that institutional identity in your card design
- Consult with your institutions communications unit to ensure that you have permission to use chosen design elements in your card design, even if prior permission was granted
- Have your final card design vetted and approved by the communications unit for compliance with institutional design, identity and branding standards
Issues Encountered at Rutgers

- A previously approved visual element, the “Block R”, was prohibited for use in subsequent ID card designs.

- It became a restricted trademark, licensed by Rutgers Athletics for use only on official merchandise.
Issues Encountered at Rutgers

• Due to a University rebranding initiative, all former logos were banned for use on communications including the ID card.

• This included the “RUconnection Card” and “RU Express” branding logos that were included on our ID card since the operation’s inception in 1998.
Issues Encountered at Rutgers

• That same initiative severely restricted the permitted layout and colors for use
  – Logotype banner must be displayed as the topmost and leftmost element on card
  – Scarlet, grey and black are the only permitted design colors
RUconnection Card (current design)

- Front of card elements:
  - Legal Name (First, Middle Initial, Last)
  - Department or School Affiliation
  - Campus
  - Issue Date
  - Primary Role (defined in policy)
  - Photo
RUconnection Card (current design)

- Back of card elements:
  - Disclaimer
  - Lost card contact info / website
  - Library barcode
  - CVC number (security)
  - Magnetic stripe in position to be swiped easily if worn as badge
Other card design examples

- Sample card designs are available in the **NACCU website resources library**
- Use menu bar to navigate to: **Resources>File Libraries>Card Designs Gallery**
- You must be a registered NACCU member and be logged in with your individual account to access the reference library
To Think About:

• Your ID card is a representation of your institution, not only in aesthetics, but also in quality and execution.

• The level of effort that is taken to produce a final product that is polished and professional will reflect your institution’s standards of excellence.

• The primary way of achieving a consistent product that meets these standards is by creating specifications and policies that will guide the production of your ID card.

• Lack of clear policies and processes may lead to inconsistencies and safety and security issues.
Creating Your Policy

• Create a definitive list of accepted identity verification documents

• Exceptions – not published in policy, but in internal process and manager training materials

• Use of preferred name should follow an institutional policy vetted by counsel and Title IX coordinator

• Policy should incorporate recommended best practices for the campus card industry
Photo Policies

• Define proper composition and cropping for consistency

• Specify the process for the self-submission of photos, if you allow cardholders to do so
Accommodation Issues

- Have an internal process to address common special needs
- Detail allowances for non-secular headwear
- Create special photo taking procedures to accommodate religious restrictions
- Allow exceptions for physical limitations and individuals with severe illness
  - Special exception for scarfs or hats worn during cancer treatment
  - Allow tinted eyeglasses for those with sight related disabilities
Policy at Rutgers

• Rutgers carding operation:
  – 9 carding locations across the state
  – more than 30 workstations, and 40 card issuers
  – Off-site photo events for off-campus and non-traditional students

• One standardized policy and workflow for all office locations:
  – Step based process guide for each stage of card issuing
  – Published University policy for ID carding
  – Internal process documents including proper photo specifications and defined solutions for religious and other accommodation issues
  – Supervisors are trained to have an awareness of their level of authority to make exceptions or accommodations in unique cases
Excerpt From the Rutgers Photo Policy

• Religious head coverings are generally permitted, as follows:
  – Men - yarmulkes, turbans and other traditional head coverings are permitted as long as no facial features are obscured.
  – Women – Scarves, veils and other religious head coverings are permitted, as long as they do not obscure facial features*. It is understood that the hairline may be slightly obscured.
  – *EXCEPTION: Some strict followers of Islam and other religions may have limitations on interaction with members of the opposite gender, and on allowing photographs to be taken. The University should accommodate them in all ways possible, including providing a same gender staff member to process the issuing of their ID card.
Manager Discretion

• Your policy should allow your office manager to use discretion to make exceptions when appropriate

• REMEMBER: All customers are entitled to be treated with the dignity they deserve
Questions Answered:

• We’ve identified the purpose of the ID card, and how we can fulfill the needs of our stakeholders
• We’ve shown how the design of the card can represent the institutional 'brand'
• We’ve explored why specifications and policies are necessary, and how they lead to uniformity and standardization
• We addressed special accommodation for religious restrictions or other situations requiring a policy exception
• We’ve discussed how to design a card with encoded identifiers that can support suspension of privileges and secure replacement
More Questions?
More Answers!

• The NACCU website contains a large library of reference materials relating to the campus card community, including:
  – An extensive terminology guide
  – Galleries of sample ID cards
  – Archive of previous web and conference presentation materials
  – Core Competencies guidelines
  – Information on joining the NACCU email listserv
  – Sample forms, policies, job descriptions, and more!

• Use the top menu bar to navigate the resources library
• You must be a registered NACCU member and be logged in with your individual account to access the resources library
Contact me:

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Thank You!

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